ENFORCEMENT CONFIDENTI

REVISED

RCRA PRIORITIZATION SYSTEM SCORING SUMMARY

FOR

MAR 2 6 1993

DURA-BOND STEEL CORPORATION

EPA SITE NUMBER: FLD-982-168-072

JACKSONVILLE, FL

SCORED BY: BONNIE PESKOE-SMITH

OF DYNAMAC CORPORATION

ON 03/05/93

GROUNDWATER SCORE	:	21.01
SURFACE WATER SCORE	:	49.75
AIR ROUTE SCORE	:	8.12
ONSITE SCORE	:	42.86
MIGRATION SCORE	:	34.71

42/418

EPA ID NO. : FLD-982-168-072
DURA-BOND STEEL CORPORATION

WS-1 GROUNDWATER ROUTE

IS THERE AN OBSERVED RELEASE? P

ROUTE CHARACTERISTICS

DEPTH TO AQUIFER (FT.) : 1

NET PRECIPITATION (IN.) : 7

PHYSICAL STATE: LIQUID, GAS, SLUDGE

CONTAINMENT: POOR

WASTE CHARACTERISTICS

CHEMICAL NAME OR WASTE CODE NUMBER: METHYL ETHYL KETONE

TOXICITY/PERSISTANCE VALUE: 6

QUANTITY KNOWN? NO

CUBIC YARDS OR TONS: 0
DRUMS : 0

AMOUNT IS LIKELY TO BE SMALL

TARGETS

GROUNDWATER USE: POSSIBLE DRINKING WATER

DISTANCE TO WELL (MILES): 0.4

WS-2 SURFACE WATER ROUTE

RELEASES

IS THERE AN OBSERVED RELEASE? Y

IS THERE A PERMITTED OUTFALL?

HAVE THERE BEEN PERMIT VIOLATIONS?

ROUTE CHARACTERISTICS

FACILITY LOCATION: NA

24-HOUR RAINFALL: NA

DISTANCE TO SURFACE WATER (MILES): NA

PHYSICAL STATE: NA

CONTAINMENT: NA

WASTE CHARACTERISTICS

CHEMICAL NAME OR WASTE CODE NUMBER: LEAD

TOXICITY/PERSISTANCE VALUE: 18

QUANTITY KNOWN? NO

CUBIC YARDS OR TONS: 0
DRUMS : 0

AMOUNT IS LIKELY TO BE SMALL

TARGETS

SURFACE WATER USE: POSSIBLE DRINKING WATER OR RECREATION

DISTANCE TO INTAKE OR CONTACT POINT (MILES): 0.4

DISTANCE TO SENSITIVE ENVIRONMENT (MILES): 3.0

WS-3 AIR ROUTE

RELEASES

IS THERE AN OBSERVED, UNPERMITTED, ON-GOING RELEASE? N

DOES THE FACILITY HAVE AN AIR OPERATING PERMIT(S)? Y

HAVE THERE BEEN ANY PERMIT VIOLATIONS OR ODOR COMPLAINTS BY RESIDENTS? N

CAN CONTAMINANTS MIGRATE INTO AIR? Y

CONTAINMENT: FAIR

WASTE CHARACTERISTICS

CHEMICAL NAME OR WASTE CODE NUMBER: MEK

TOXICITY/PERSISTANCE VALUE: 2

QUANTITY KNOWN? NO

CUBIC YARDS OR TONS: 0
DRUMS : 0

AMOUNT IS LIKELY TO BE SMALL

TARGETS

POPULATION: RESIDENCES ARE LOCATED WITHIN FOUR MILES

DISTANCE TO SENSITIVE ENVIRONMENT (MILES): 3.0

WS-4 ON SITE CONTAMINATION

ACCESS TO SITE: LIMITED ACCESS

IS THERE AN OBSERVED SURFACE SOIL CONTAMINATION? Y

CONTAINMENT: POOR

WASTE CHARACTERISTICS

CHEMICAL NAME OR WASTE CODE NUMBER: LEAD

TOXICITY/PERSISTANCE VALUE: 3

TARGETS

DISTANCE TO RESIDENTIAL AREAS (MILES): 0.25

IS THERE AN ON-SITE SENSITIVE ENVIRONMENT: N

Blank Page

ENFORCEMENT CONFIDENTIAL

RCRA PRIORITIZATION SYSTEM SCORING SUMMARY

FOR

DURA-BOND STEEL CORPORATION

EPA SITE NUMBER: FLD-982-168-072

JACKSONVILLE, FL

SCORED BY: BONNIE PESKOE-SMITH

OF DYNAMAC CORPORATION

ON 03/05/93

GROUNDWATER SCORE	:	73.08
SURFACE WATER SCORE	:	57.61
AIR ROUTE SCORE	:	47.44
ONSITE SCORE	:	42.86
MIGRATION SCORE	:	56.45

421419

EPA ID NO. : FLD-982-168-072
DURA-BOND STEEL CORPORATION

WS-1 GROUNDWATER ROUTE

IS THERE AN OBSERVED RELEASE? P

ROUTE CHARACTERISTICS

DEPTH TO AQUIFER (FT.) : 1

NET PRECIPITATION (IN.) : 7

PHYSICAL STATE: LIQUID, GAS, SLUDGE

CONTAINMENT: POOR

WASTE CHARACTERISTICS

CHEMICAL NAME OR WASTE CODE NUMBER: LEAD

TOXICITY/PERSISTANCE VALUE: 18

QUANTITY KNOWN? NO

CUBIC YARDS OR TONS: 0
DRUMS : 0

AMOUNT IS LIKELY TO BE SMALL

TARGETS

Possible

GROUNDWATER USE: DRINKING WATER

DISTANCE TO WELL (MILES): 0.4

EPA ID NO. : FLD-982-168-072
DURA-BOND STEEL CORPORATION

WS-2 SURFACE WATER ROUTE

RELEASES

IS THERE AN OBSERVED RELEASE? Y

IS THERE A PERMITTED OUTFALL? NO

HAVE THERE BEEN PERMIT VIOLATIONS? NO

ROUTE CHARACTERISTICS

FACILITY LOCATION: NA

24-HOUR RAINFALL: NA

DISTANCE TO SURFACE WATER (MILES): NA

PHYSICAL STATE: NA

CONTAINMENT: NA

WASTE CHARACTERISTICS

CHEMICAL NAME OR WASTE CODE NUMBER: LEAD

TOXICITY/PERSISTANCE VALUE: 18

QUANTITY KNOWN? NO

CUBIC YARDS OR TONS:	0
DRUMS :	0

AMOUNT IS LIKELY TO BE ~~LARGE~~ SMALL

TARGETS

SURFACE WATER USE: POSSIBLE DRINKING WATER OR RECREATION

DISTANCE TO INTAKE OR CONTACT POINT (MILES): < 0.4

DISTANCE TO SENSITIVE ENVIRONMENT (MILES): 3.0

EPA ID NO. : FLD-982-168-072
DURA-BOND STEEL CORPORATION

WS-3 AIR ROUTE

RELEASES

IS THERE AN OBSERVED, UNPERMITTED, ON-GOING RELEASE? X NO

DOES THE FACILITY HAVE AN AIR OPERATING PERMIT(S)? NA

HAVE THERE BEEN ANY PERMIT VIOLATIONS OR ODOR COMPLAINTS BY RESIDENTS? NA

CAN CONTAMINANTS MIGRATE INTO AIR? NA

CONTAINMENT: NA

WASTE CHARACTERISTICS

CHEMICAL NAME OR WASTE CODE NUMBER: LEAD

TOXICITY/PERSISTANCE VALUE: 3

QUANTITY KNOWN? NO

CUBIC YARDS OR TONS:		0
DRUMS	:	0

AMOUNT IS LIKELY TO BE SMALL

TARGETS

POPULATION: RESIDENCES ARE LOCATED WITHIN FOUR MILES

DISTANCE TO SENSITIVE ENVIRONMENT (MILES): 3.0

EPA ID NO. : FLD-982-168-072
DURA-BOND STEEL CORPORATION

WS-4 ON SITE CONTAMINATION

ACCESS TO SITE: LIMITED ACCESS

IS THERE AN OBSERVED SURFACE SOIL CONTAMINATION? Y

CONTAINMENT: POOR

WASTE CHARACTERISTICS

CHEMICAL NAME OR WASTE CODE NUMBER: LEAD

TOXICITY/PERSISTANCE VALUE: 3

TARGETS

DISTANCE TO RESIDENTIAL AREAS (MILES): 0.25

IS THERE AN ON-SITE SENSITIVE ENVIRONMENT: N

Blank Page

ENFORCEMENT CONFIDENTIAL

RCRA PRIORITIZATION SYSTEM SCORING SUMMARY

FOR

DURA FORM STEEL CORPORATION

EPA SITE NUMBER: FLD982168072

DUVAL COUNTY, JACKSONVILLE, FLORIDA

SCORED BY: CONNIE PERLOE SMITH

OF DYNAMAC CORPORATION

ON [illegible]/92

GROUND WATER ROUTE SCORE :

SURFACE WATER ROUTE SCORE:

AIR ROUTE SCORE :

ON-SITE SCORE :

MIGRATION SCORE :

Needs Re-scoring: As noted.

Verbal (w) Davy Simonson
Chip 3-25-93

421417

Docket Number

WS-1 GROUND WATER ROUTE

A. Is there an observed release? — Yes (45) | No (0) | Possible (10)

B. Route Characteristics

1b. Depth to Aquifer (ft.) — 0-20 (6) | 21-75 (4) | 76-150 (2) | 150+ (0)

2b. Net Precipitation (in.) — <-10 (0) | -10 to +5 (2) | +5 to +15 (4) | >15 (6)

3b. Physical State — Stable Solid (0) | Unstable Solid (1) | Powder, Ash (2) | Liquid, Gas Sludge (3)

C. Containment — Very Good (0) | Good (1) | Fair (2) | Poor (3)

RFA letter to Power ... dated 8/11/92 Several drums were open & some were caking

D. Waste Characteristics

1d. Chemical name or waste code number ____________ (Methyl Ethyl Ketone (MEK 6))

2d. Toxicity/Persistence Value — 0 (0) | 3 (3) | 6 (6) | 9 (9) | 12 (12) | 15 (15) | 18 (18)

3d. Quantity known? — Yes | No

Yes? Enter amount: Cu yds or tons ______
Drums ______ (÷ 4 = cu yds)

Total ________

No? Is amount likely to be small — Yes (1) | No
Is amount likely to be large? — Yes (4) | No
Are large storage or disposal areas present? — Yes (8) | No
(only one yes allowed)

E. Targets

1e. Groundwater use:
- Drinking water? — Yes (5) | No
- Possible drinking water? — Yes (4) | No
- Agriculture or industrial? — Yes (3) | No
- Quality impacted? — Yes (2) | No
- Quality not impacted? — Yes (0)* | No

(only one yes allowed)

2e. Distance to intake (miles) — <1/2 (4) | 1/2 to 1 (3) | 1 to 2 (2) | 2 to 3 (1) | >3 (0)

Note:
* Cannot be used if A = 45

WS-2 SURFACE WATER ROUTE

A. Releases

RFA Section III; many ... Stain ... + lack of vegetation

1a.	Is there an observed release?	Yes (45)	No (0)	
2a.	Is there a permitted outfall?	Yes (5)	No (0)	CPA Volume I, Part I Figure B...
3a.	Have there been permit violations?	Yes (5)	No (0)	... letter ... Warning Notice No. WN90-0216 ...

No SW violations

B. Route Characteristics

1b.	Facility Location	Flood-Prone Area (3)	100-year Flood Plain (2)	Other (1)	
2b.	24-hour Rainfall (in.)	<1.0 (0)	1.0 to 2.0 (1)	2.1 to 3.0 (2)	>3.0 (3)
3b.	Distance to surface water (miles)	<1/4 (6)	1/4 to 1 (4)	1 to 2 (2)	>2 (0)
4b.	Physical State	Stable Solid (0) / Unstable Solid (1)	Powder, Ash (2)	Liquid, Gas Sludge (3)	

Closure Permit App. Volume II, Part II p. 7 "small area is within the 100 year flood plain ... are not ..."

Rainfall Frequency Atlas

C. Containment — Very Good (0) · Good (1) · Fair (2) · Poor (3)

D. Waste Characteristics

1d. Chemical name or waste code number: lead

2d. Toxicity/Persistence Value: 0 (0) · 3 (3) · 6 (6) · 9 (9) · 12 (12) · 15 (15) · 18 (18)

3d. Quantity known? Yes · No

Yes? Enter amount: Cu yds or tons ______
Drums ______ (÷ 4 = cu yds)

Total ______

No?
Is amount likely to be small? — Yes (1) — No
Is amount likely to be large? — Yes (4) — No
Are large storage or disposal areas present? — Yes (8) — No
(only one yes allowed)

RFA Section III multiple ...

* Note RFA p. III-18 ...

SURFACE WATER ROUTE - Continued

E. Targets

1e.	Surface Water use:	Drinking water?	Yes (5)	No RFA p [illegible]
		Possible drinking water?	Yes (4)	No flows [illegible]
		-Recreation?	Yes (4)	No
		Agriculture or industrial?	Yes (3)	No
		Quality impacted?	Yes (2)	No
		Quality not impacted but within 3 miles?	Yes (1)*	No
		None within 3 miles?	Yes (0)*	No
			(only one yes allowed)	

2e.	Distance to intake or contact point (miles)	≤1/2 (4)	1/2 to 1 (3)	1 to 2 (2)	2 to 3 (1)	≥3 (0)	RFA [illegible]
3e.	Distance to sensitive environment (miles)	≤1/2 (6)	1/2 to 1 (4)	1 to 2 (2)		≥2 (0)	[illegible]

Note:
* Cannot be used if A = 45

WS-3 AIR ROUTE

A. Releases

1a. Is there an observed, unpermitted, ongoing release? — Yes (45) / No (0)

2a. Does the facility have an air operating permit? — Yes (5) / No (0)

3a. Have there been any permit violations or odor complaints by residents? — Yes (10) / No (0)

4a. Can contaminants migrate into air? — Yes (3) / No (0)

5a. Containment — Very Good (0) / Good (1) / Fair (2) / Poor (3)

B. Waste Characteristics

1b. Chemical name or waste code number MEK ________________

2b. Toxicity — 0 (0) / 1 (3) / 2 (6) / 3 (9)

3b. Quantity known? — Yes / No

Yes? Enter amount: Cubic yards or tons ______ Drums ______ (÷ 4 = cu. yds.)

Total ________

No?
- Is amount likely to be small? — Yes (1) / No
- Is amount likely to be large? — Yes (4) / No
- Are large storage or disposal areas present? — Yes (8) / No

(only one yes allowed)

C. Targets

1c. Population

- Are residences located within four miles? — Yes (25) / No
- Are other industries located within four miles? — Yes (20) / No
- Are agricultural lands located within four miles? — Yes (15) / No
- Any other situation. — Yes (10) / No

(only one yes allowed)

2c. Distance to sensitive environments (miles)

< 1/2 (6) / 1/2 to 1 (4) / 1 to 2 (2) / > 2 (0)

no [illegible] available

WS-4 ON-SITE CONTAMINATION

A. Access to site — Inaccessible (0) | Limited Access (2) | Unlimited Access (4)

Closure Permit App. ?, p. 14 - Section 2.4

B. Is there observed surface soil contamination? — Yes (25) | No (0)

C. Containment — Very Good (1) | Good (2) | Fair (3) | Poor (4)

D. Waste characteristics

Chemical Name or Waste Code Number: MCl

Toxicity/Persistence Value — 0 (0) | 1 (1) | 2 (2) | 3 (3) tox. table

E. Targets

1e. Distance to residential areas — $\leq 1/4$ (6) | 1/4 to 1/2 (4) | 1/2 to 1 (2) | ≥ 1 (0)

2e. Is there on-site sensitive environment?

Yes (1) | No (0) no documentation available

CALCULATE ON-SITE SCORE (S_o)

If A = 0, then $S_o = B \times D \times (1e + 2e)/21$

If A $\neq$ 0, then $S_o = A \times (B + C) \times D \times (1e + 2e)/21$ [a]

If $B + C > 25$, then $B + C = 25$

(a) The value 21 standardizes the on-site route score to a value between 0 and 100.

RCRA FACILITY ASSESSMENT

OF

DURA-BOND STEEL CORPORATION

JACKSONVILLE, FLORIDA

EPA I.D. FLD982168072

SUBMITTED BY:

A.T. KEARNEY, INC.
1100 ABERNATHY ROAD
ATLANTA, GA 30328

SUBMITTED TO:

MS. ROWENA SHEFFIELD
REGIONAL PROJECT OFFICER
345 COURTLAND STREET
ATLANTA, GA 30365

IN RESPONSE TO:

EPA CONTRACT
NO. 68-W9-0040

WORK ASSIGNMENT
NO. R04-21-18

Kearney/Centaur Division
A.T. Kearney, Inc.
1100 Abernathy Road, Suite 900
Atlanta, Georgia 30328-5603
404 393 9900
Facsimile 404 396 3091

Management
Consultants

ATKEARNEY

August 11, 1992

Ms. Rowena Sheffield
Regional Project Officer
U.S. Environmental Protection Agency
345 Courtland Street NE
Atlanta, Georgia 30365

Reference: EPA Contract No. 68-W9-0040; Work Assignment No. R04-21-18; Dura-Bond Steel Corporation; Jacksonville, Florida; EPA I.D. No. FLD982168072; RCRA Facility Assessment; Final Deliverable

Dear Ms. Sheffield:

Enclosed please find the RCRA Facility Assessment (RFA) for the above-referenced facility. This report presents the results of the Preliminary Review (PR) and the Visual Site Inspection (VSI). The RFA resulted in the identification of 22 Solid Waste Management Units (SWMUs) and 3 Areas of Concern (AOCs).

The Dura-Bond Steel Corporation facility is located in Jacksonville, Florida, approximately five miles west of downtown Jacksonville. The site includes a former steel coating and painting facility, several hazardous waste drum storage areas, a paint shed, and a former waste oil underground storage tank (UST). Hazardous MEK/paint waste (F005) was generated in the coating/painting area from the use of methyl ethyl ketone (MEK) as a cleaning solvent for painting equipment. During a FDER hazardous waste compliance inspection on October 22, 1990, a Dura-Bond representative stated that approximately one 55-gallon drum of the F005 waste was generated each month. The inspection revealed that at least fifty seven 55-gallon drums had accumulated inside and outside the main facility building. Several drums were open and some were leaking or overflowing. Soil staining was evident in the vicinity of the drums.

The facility is presently owned by Dura-Bond Steel Corporation but leased by Balfour Beatty Construction, Inc. Current site operations involve structural steel operations, including sandblasting, welding, and minor painting.

The 13 units listed below have been designated for confirmatory sampling:

Temporary Waste Storage Area (SWMU 3)
Hazardous Materials/Waste Storage Area (SWMU 4)
Wheelabrator Dust Collector (SWMU 5)
Waste Oil Tank (SWMU 6)
Ramp Area (SWMU 7)
Sandblast Residue Fill Area (SWMU 8)
Historical Outside Storage Area (SWMU 9)
Covered Soil Pile (SWMU 13)
Uncovered Soil Pile (SWMU 14)
Sandblast Area (SWMU 16)
Storm Water System (SWMU 18)
Drainage Ditch (SWMU 19)
Underground and Aboveground Storage Tanks (AOC B)

The Paint Cans Excavation Area (SWMU 12) has been designated as requiring a RFI. No further action is suggested for the remaining units, provided the facility remains in compliance with the applicable permits. Refer to the Executive Summary Table on page I-4 for a synopsis of the facility SWMUs and AOCs.

Davy Simonson, the EPA Work Assignment Manager (WAM), has requested that one original set of photographs from a Florida Department of Environmental Regulation (FDER) inspection in October 1990 (by Pam Fellabaum, FDER) be included with this deliverable (in addition to the VSI Photographic Log). The three additional copies of this RFA report contain black and white photocopies of these FDER photographs.

Per EPA's request, this deliverable has been double-sided and reproduced on recycled paper. Please contact me or Phebe Davol, the Kearney Team WAM (who can be reached at 703/739-1626) if you have any questions concerning this report.

Sincerely,

Denise Turner

A. Denise Turner, Ph.D.
Technical Director

Enclosure

cc: D. Simonson, EPA Region IV
W. Jordan
L. Poe
P. Davol
J. Ashworth
D. Scott

RCRA FACILITY ASSESSMENT

OF

DURA-BOND STEEL CORPORATION
JACKSONVILLE, FLORIDA

EPA I.D. NO. FLD982168072

SUBMITTED BY:

A.T. KEARNEY, INC.
1100 ABERNATHY ROAD
SUITE 900
ATLANTA, GEORGIA 30328

SUBMITTED TO:

MS. ROWENA SHEFFIELD
REGIONAL PROJECT OFFICER
U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET
ATLANTA, GEORGIA 30365

IN RESPONSE TO:

EPA CONTRACT NO. 68-W9-0040
WORK ASSIGNMENT NO. R04-21-18

AUGUST 1992

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

The property was apparently developed in the late 1950s by Bushnell Steel Company and sold to Florida Steel in 1958. From 1958 to 1982, Florida Steel conducted steel coating operations at the facility using various paints containing lead and solvents. Fab Steel Company of Florida purchased the site in 1982 and sold it to Dura-Bond in 1987. Specific information regarding the handling, storage, and disposal of hazardous waste and materials at the site prior to Dura-Bond is unavailable (Reference 92).

The facility is presently operated by Balfour Beatty Construction, Inc. Current site operations involve structural steel operations, including sandblasting, welding, and minor painting. The current facility has no active RCRA-regulated units.

The Dura-Bond facility came under RCRA regulation in October 1990 following a FDER hazardous waste compliance inspection designed to ascertain the facility's compliance with 40 CFR Parts 260 to 268 (Reference 19). Dura-Bond was issued Warning Notice No. WN90-0216HW16NED by FDER dated December 5, 1990. In accordance with 40 CFR Part 264, FDER designated two hazardous waste storage units at the facility for closure.

Following negotiations with FDER, Dura-Bond entered into a Consent Order (OGC Case No. 90-0131) on March 5, 1991. A Hazardous Waste Facility Closure Permit Application was submitted to FDER on April 21, 1992 for the closure of the two SWMUs classified by FDER as land treatment units: the Area Adjacent to the West Side of Main Facility Building (SWMU 1) and the Area Immediately Adjacent to Dumpster (SWMU 2) (Reference 92).

A total of 22 SWMUs and 3 AOCs were identified at the Dura-Bond facility as a result of the PR and VSI. The following units require further documentation for accurate assessment of their potential for release:

The 13 units below have been designated for confirmatory sampling at the facility:

Temporary Waste Storage Area (SWMU 3)
Hazardous Materials/Waste Storage Area (SWMU 4)
Wheelabrator® Dust Collector (SWMU 5)
Waste Oil Tank (SWMU 6)
Ramp Area (SWMU 7)
Sandblast Residue Fill Area (SWMU 8)
Historical Outside Storage Area (SWMU 9)
Covered Soil Pile (SWMU 13)
Uncovered Soil Pile (SWMU 14)
Sandblast Area (SWMU 16)
Storm Water System (SWMU 18)
Drainage Ditch (SWMU 19)
Underground and Aboveground Storage Tanks (AOC B)

I. EXECUTIVE SUMMARY

This RCRA Facility Assessment (RFA) is based on a Preliminary Review (PR) of U.S. EPA Region IV, the Florida Department of Environmental Regulation (FDER), the City of Jacksonville files, and a visual site inspection (VSI). The PR was conducted during May 1992 and the VSI was conducted on June 25, 1992. The purpose of the RFA is to identify Solid Waste Management Units (SWMUs) located at the facility and to evaluate their potential for release of hazardous constituents to the air, surface water, soil, and ground water. The potential for subsurface gas generation is also considered. In addition to SWMUs, Areas of Concern (AOCs) are also identified. AOCs may be potential sources of releases of hazardous constituents to the environment which do not necessarily involve wastes.

The 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA) authorized EPA to require corrective action for releases of hazardous wastes and/or hazardous constituents from SWMUs and AOCs at all operating, closed or closing RCRA facilities. The intention of this authority is to address previously unregulated releases to air, surface water, soil, and ground water. The first phase of the corrective action program, as established by EPA, is development of a RFA. The RFA includes a PR of all available relevant documents, a VSI and, if appropriate, a Sampling Visit (SV). Based on the results of these investigations, the SWMUs and AOCs at the facility are identified, and each is assessed as to its potential for release of hazardous constituents and its need for corrective action.

This RFA is based on a PR of files from EPA Region IV, FDER, the City of Jacksonville, and a VSI. The PR was performed during May 1992, and the VSI was conducted on June 25, 1992.

The Dura-Bond Steel Corporation (Dura-Bond) facility is located in Jacksonville, Florida, approximately five miles west of downtown Jacksonville. The site includes a former steel coating and painting facility, several hazardous waste drum storage areas, a paint shed, and a former waste oil underground storage tank (UST). Hazardous waste (F005) was generated in the coating/painting area from the use of methyl ethyl ketone (MEK, also known as 2-butanone) as a cleaning solvent for painting equipment. During a FDER hazardous waste compliance inspection on October 22, 1990, a Dura-Bond representative stated that approximately one 55-gallon drum of the F005 waste was generated each month. The inspection revealed that at least fifty seven 55-gallon drums had accumulated inside and outside the main facility building. Several drums were open and some were leaking or overflowing. Soil staining was evident in the vicinity of the drums (Reference 20).

A RCRA Facility Investigation (RFI) is suggested at the facility for the Paint Cans Excavation Area (SWMU 12). No further action is suggested for the remaining units, provided the facility remains in compliance with the applicable permits. Refer to the Executive Summary Table for a synopsis of the facility SWMUs and AOCs.

Table I-1

Executive Summary Table

TABLE I-1
DURA-BOND STEEL CORPORATION
EXECUTIVE SUMMARY

SWMU/AOC	TYPE OF UNIT	YEARS IN OPERATION	WASTES MANAGED	POLLUTION MIGRATION PATHWAYS[5]	EVIDENCE OF RELEASES[1]	[2]EXPOSURE POTENTIAL	NEED FOR INTERIM MEASURES	RECOMMENDATIONS		
								RFI	NO FURTHER ACTION	FURTHER ASSESSMENT
1 Area Adjacent to West Side of Main Facility Building	Land Treatment Unit	1987 to 1992	MEK/paint waste (F005)	SW,S,GW A,SG	Yes	H M			X[6]	
2 Area Immediately Adjacent to Dumpster	Land Treatment Unit	1987 to 1992	MEK waste contaminated rags	SW,S,GW A,SG	Yes	H M			X[6]	
3 Temporary Waste Storage Area	Drum Storage Area	1987 to 1992	MEK/paint waste (F005, F003)	SW,S,GW A SG	Yes	M L U				X[2]
4 Hazardous Materials/ Waste Storage Area	Drum Storage Area	1987 to 1992	MEK/paint waste (F005)	SW,S,GW A,SG	Yes	H M				X[2]
5 Wheelabrator® Dust Collector	Baghouse and Drum Storage Area	1987 to 1992	Millscale, shot/grit residue may contain Chromium	SW,S,GW A SG	Yes	H M L				X[2]
6 Waste Oil Tank	Underground Storage Tank	Unknown to 1989	Waste Oil	S,GW SW,SG A	No	H M L				X[2]

---

[1] L designates a low, M designates a moderate, H designates a high, and U designates an Unknown exposure potential; see SWMU description for substantiation
[2] Confirmatory sampling is suggested
[3] Releases from these units are monitored under RCRA Post-Closure, NPDES, UIC, and/or FDER Air Permits
[4] See SWMU description for specific comments pertaining to this unit
[5] GW designates Groundwater, SW designates Surface Water, S designates Soil, A designates Air, and SG designates Subsurface Gas
[6] No Further Action contingent upon continued compliance with the Post-Closure Permit

Table I-1
Dura-Bond Steel Corporation
Executive Summary
(Continued)

SWMU/AOC	TYPE OF UNIT	YEARS IN OPERATION	WASTES MANAGED	POLLUTION MIGRATION PATHWAYS[5]	EVIDENCE OF RELEASES[1]	[2]EXPOSURE POTENTIAL	NEED FOR INTERIM MEASURES	RECOMMENDATIONS		
								RFI	NO FURTHER ACTION	FURTHER ASSESSMENT
7 Ramp Area	Drum Storage Area and Unloading Area	Unknown to 1992	Waste Oil	A,SW,S,GW SG	Yes	L U				X[2]
8 Sandblast Residue Fill Area	Disposal Area	1987 to 1992	Black Beauty™ in Sandblast Residue	SW,S,GW A SG	Yes	H L U				X[2]
9 Historical Outside Storage Area	Drum Storage Area	1987 to 1992	Mixed waste MEK/paint (F005)	SW,S,GW A SG	Yes	M L U				X[2]
10 Blue Shed	Drum Storage Area	1987 to 1992	No information available	A,SW,S,GW SG	No	L U			X	
11 Sheet Metal Building	Drum Storage Area	1987 to 1992	No information available	A,SW,S,GW SG	No	L U			X	
12 Paint Cans Excavation Area	Landfill	Unknown (possibly 1970s) to 1992	Red lead-based primer paints	SW,S,GW, SG A	Yes	H H L		X		

---

1 L designates a low, M designates a moderate, H designates a high, and U designates an Unknown exposure potential; see SWMU description for substantiation
2 Confirmatory sampling is suggested
3 Releases from these units are monitored under RCRA Post-Closure, NPDES, UIC, and/or FDER Air Permits
4 See SWMU description for specific comments pertaining to this unit
5 GW designates Groundwater, SW designates Surface Water, S designates Soil, A designates Air, and SG designates Subsurface Gas
6 No Further Action contingent upon continued compliance with the Post-Closure Permit

Table I-1
Dura-Bond Steel Corporation
Executive Summary
(Continued)

SWMU/AOC	TYPE OF UNIT	YEARS IN OPERATION	WASTES MANAGED	POLLUTION MIGRATION PATHWAYS[5]	EVIDENCE OF RELEASES[1]	[2]EXPOSURE POTENTIAL	NEED FOR INTERIM MEASURES	RECOMMENDATIONS		
								RFI	NO FURTHER ACTION	FURTHER ASSESSMENT
13 Covered Soil Pile	Waste Pile	1992	High VOC and metal concentrations	SW A,S,GW SG	Yes	H M L				X[2]
14 Uncovered Soil Pile	Waste Pile	1992	High VOC and metal concentrations	SW S,GW A,SG	Yes	H M L				X[2]
15 Shot Blast Drum Storage Area	Drum Storage Area	1987 to 1992	Millscale, shot/grit residue may contain Chromium	A,SW,S,GW, SG	No	L			X	
16 Sandblast Area	Process Area	1987 to 1992	Black Beauty™ in Sandblast Residue	SW,S,GW A,SG	Yes	H L				X[2]
17 Construction Debris Pile	Waste Pile	1992	Facility Debris	A,SW,S,GW SG	No	L L			X	
18 Storm Water System	Underground Pipes	Unknown to 1992	No information available	SW A S,GW,SG	Yes	H L U				X[2]

[1] L designates a low, M designates a moderate, H designates a high, and U designates an Unknown exposure potential; see SWMU description for substantiation
[2] Confirmatory sampling is suggested
[3] Releases from these units are monitored under RCRA Post-Closure, NPDES, UIC, and/or FDER Air Permits
[4] See SWMU description for specific comments pertaining to this unit
[5] GW designates Groundwater, SW designates Surface Water, S designates Soil, A designates Air, and SG designates Subsurface Gas
[6] No Further Action contingent upon continued compliance with the Post-Closure Permit

Table I-1
Dura-Bond Steel Corporation
Executive Summary
(Continued)

SWMU/AOC	TYPE OF UNIT	YEARS IN OPERATION	WASTES MANAGED	POLLUTION MIGRATION PATHWAYS[5]	EVIDENCE OF RELEASES[1]	[2]EXPOSURE POTENTIAL	NEED FOR INTERIM MEASURES	RECOMMENDATIONS		
								RFI	NO FURTHER ACTION	FURTHER ASSESSMENT
19 Drainage Ditch	Unlined Drainage Ditch	1987 to 1992	Runoff from Wheelabrator Dust Collector (SWMU 5) and the Ramp Area (SWMU 7)	SW,S,GW A SG	Yes	H L U				X[2]
20 Paint Can Excavation Drum Storage Area	Drum Storage Area	1992	High VOC and metal concentrations	A,SW,S GW,SG	No	L L			X	
21 Construction Debris/Soil Pile	Waste Pile	1987 to 1992	Debris from area near Paint Cans Excavation Drum Storage Area (SWMU 12)	A,SW,S GW,SG	No	L L			X	
22 Dumpster	Dumpster	1987 to 1992	MEK/paint waste contaminated rags (F005)	A,SW,S,GW SG	No	L U			X	
A Compressor Area	Process Area	Unknown to 1992	Oil	A,SW,S,GW SG	Yes	L U			X	

---

[1] L designates a low, M designates a moderate, H designates a high, and U designates an Unknown exposure potential; see SWMU description for substantiation
[2] Confirmatory sampling is suggested
[3] Releases from these units are monitored under RCRA Post-Closure, NPDES, UIC, and/or FDER Air Permits
[4] See SWMU description for specific comments pertaining to this unit
[5] GW designates Groundwater, SW designates Surface Water, S designates Soil, A designates Air, and SG designates Subsurface Gas
[6] No Further Action contingent upon continued compliance with the Post-Closure Permit

Table I-1
Dura-Bond Steel Corporation
Executive Summary
(Continued)

SWMU/AOC	TYPE OF UNIT	YEARS IN OPERATION	WASTES MANAGED	POLLUTION MIGRATION PATHWAYS[5]	EVIDENCE OF RELEASES[1]	[2]EXPOSURE POTENTIAL	NEED FOR INTERIM MEASURES	RECOMMENDATIONS		
								RFI	NO FURTHER ACTION	FURTHER ASSESSMENT
B Underground and Aboveground Storage Tanks	Underground and Aboveground Tanks	Unknown to 1989	High OVA readings adjacent to tanks #2 and #4	A,SW,S, GW,SG	Yes	L L				X[2]
C Wheelabrator® Sump	Process Sump	Unknown to 1992	Millscale, shot/grit residue may contain chromium	SW,S,GW A SG	No	H L U			X	

[1] L designates a low, M designates a moderate, H designates a high, and U designates an Unknown exposure potential; see SWMU description for substantiation
[2] Confirmatory sampling is suggested
[3] Releases from these units are monitored under RCRA Post-Closure, NPDES, UIC, and/or FDER Air Permits
[4] See SWMU description for specific comments pertaining to this unit
[5] GW designates Groundwater, SW designates Surface Water, S designates Soil, A designates Air, and SG designates Subsurface Gas
[6] No Further Action contingent upon continued compliance with the Post-Closure Permit

II. INTRODUCTION

The 1984 Hazardous and Solid Waste Amendments to the Resource Conservation and Recovery Act authorized EPA to require corrective action for releases of hazardous wastes and/or hazardous constituents from SWMUs and AOCs at all operating, closed or closing RCRA facilities. The intention of this authority is to address previously unregulated releases to air, surface water, soil, and ground water.

The first phase of the corrective action program, as established by EPA, is development of a RFA. The RFA includes a PR of all available relevant documents, a VSI and, if appropriate, a SV. Based on the results of these investigations, the SWMUs and AOCs at the facility are identified, and each is assessed as to its potential for release of hazardous constituents and its need for corrective action.

This report summarizes the results of the file review conducted during May 1992 and the VSI conducted on June 25, 1992. A total of 22 SWMUs and 3 AOCs were identified at the site. Chapter II summarizes the file search and the VSI, and provides additional information concerning the history, process descriptions, waste management practices, environment, and demographic setting of the facility. The SWMUs and AOCs are assessed in Chapter III. Tables which are presented in Chapter IV list all units/areas and categorize them according to the further action required. Chapter V provides a suggested sampling strategy for those units requiring confirmatory sampling.

The references used in this report are listed in Chapter VI. Appendix A contains the VSI log which was maintained during the site visit, and Appendix B presents the Photographic Log documenting the physical condition of the SWMUs and AOCs at the time of the VSI. Appendix C presents the Supplemental Photographic Log documenting FDER's October 1990 inspection of the facility. Appendix D provides a SWMU location map.

A. Preliminary Review and VSI

This RFA report is based on a review of file material available at EPA Regional and State offices, and on observations made during the VSI. The file review was conducted during May 1992 and included a review of RCRA, CERCLA, Clean Air Act (CAA), and Clean Water Act (CWA) files available at EPA Region IV, Atlanta, Georgia and the Florida Department of Environmental Regulation (FDER). The VSI was conducted on June 25, 1992 by an EPA contractor team (Phebe Davol and David Kassel of A.T. Kearney) and a representative from EPA Region IV (Davy Simonson).

The VSI team arrived at the facility at 9:00 a.m. on June 25, 1992. They met with Mr. Wayne Norris (President of Dura-Bond) and Mr. John Elrod and Mr. Jim Oliveros (environmental consultants with Missimer & Associates, Inc. of Jacksonville). The group discussed the facility's history, processes, waste management practices, and remediation activities. Pamela Fellabaum of FDER joined the group at 10:00 a.m. The team began the site tour at 10:15 a.m. The weather was partly cloudy with a temperature of approximately 80°F and a light wind out of the south-southwest. Ms. Fellabaum showed the team members the historical waste storage and contamination areas based on her October 1990 inspection of the facility. The team viewed the northeastern portion of the facility, including the Ramp Area (SWMU 7), the Wheelabrator® Dust Collector (SWMU 5), the Sandblast Residue Fill Area (SWMU 8), and the Shot Blast Drum Storage Area (SWMU 15). The team also viewed the areas identified as hazardous waste storage areas in the October 1990 FDER inspection. These included the Area Adjacent to the West Side of Main Facility Building (SWMU 1), the Area Immediately Adjacent to Dumpster (SWMU 2), the Temporary Waste Storage Area (SWMU 3), the Historical Outside Storage Area (SWMU 9), the Hazardous Materials/Waste Storage Area (SWMU 4), and the Dumpster (SWMU 22).

The team then viewed the Sheet Metal Building (SWMU 11) and the former location of the Blue Shed (SWMU 10). The tour proceeded to the Paint Cans Excavation Area (SWMU 12) on the southern side of the property and the team also inspected the Covered Soil Pile (SWMU 13), the Uncovered Soil Pile (SWMU 14), and the Paint Can Excavation Drum Storage Area (SWMU 20). After inspecting the Construction Debris/Soil Pile (SWMU 21), the team continued the tour on the eastern side of the main facility building, viewing the Compressor Area (AOC A), the Drainage Ditch (SWMU 19), and the area of the former underground Waste Oil Tank (SWMU 6).

The team then walked the Highway Avenue drainage ditch along the southern outside edge of the facility, before re-entering the facility from the south gate near the excavation area. The group also walked north along the western fence line, viewing the Construction Debris Pile (SWMU 17) and the outside Sandblast Area (SWMU 16). The team observed the Wheelabrator® Sump (AOC C) and the former coating/painting area.

At approximately 1:45 p.m., the team left the facility for lunch, returning at 3:00 p.m. to resume discussions and the site tour. The team further discussed waste management practices, manufacturing processes, the recent excavation of paint cans and sampling efforts with Dura-Bond representatives. The team then investigated possible Storm Water System (SWMU 18) drainage routes on the property.

The tour of the facility was completed at approximately 5:30 p.m., and the team returned to the facility office to conduct the close-out meeting. The team left the facility at 7:00 p.m.

B. Facility Description

The Dura-Bond site occupies approximately 16.7 acres in Duval County, Florida. The facility is located approximately 5 miles west of downtown Jacksonville, Florida at latitude 30° 19′ 20" north and longitude 81° 44′ 41" west. The site lies approximately 1100 feet north of Interstate 10 (I-10) and is bordered on the east by Ellis Road. Beaver Street forms the northern property boundary and Highway Avenue forms the southern property boundary. There is a drainage ditch running along the southern site boundary next to Highway Avenue. Topographic maps showing the facility's location within the state are provided in Figures II-1 and II-2.

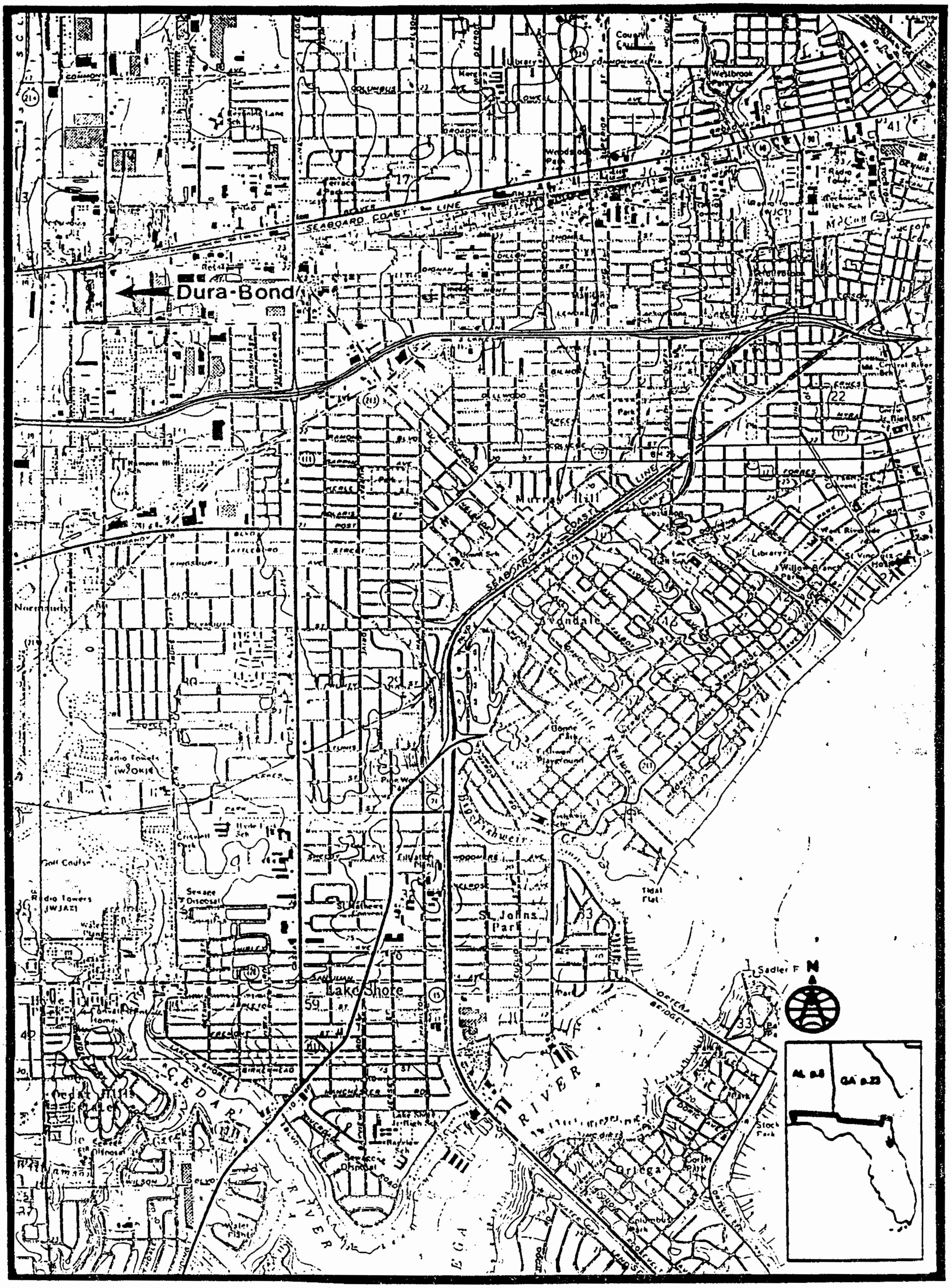
The site includes a main facility building used for coating and painting operations, several smaller shed-type buildings (including a warehouse and paint shed), two office buildings on the eastern side of the property, and an unpaved raw material and product storage area on the western side of the main facility building. The site is bounded by Chatham Scrap Metal yard to the west. A site location map is presented in Figure II-3. The surrounding area is zoned for heavy industrial (Reference 92).

According to Missimer and Associates, Inc. consultants, the land on which this site is constructed may have previously been used for rice farming. An artesian well was used for irrigation. This well, which is located in what is now the main facility building, is now covered by a large concrete slab (Reference 100). A map depicting area ground-water well locations is provided in Figure II-4.

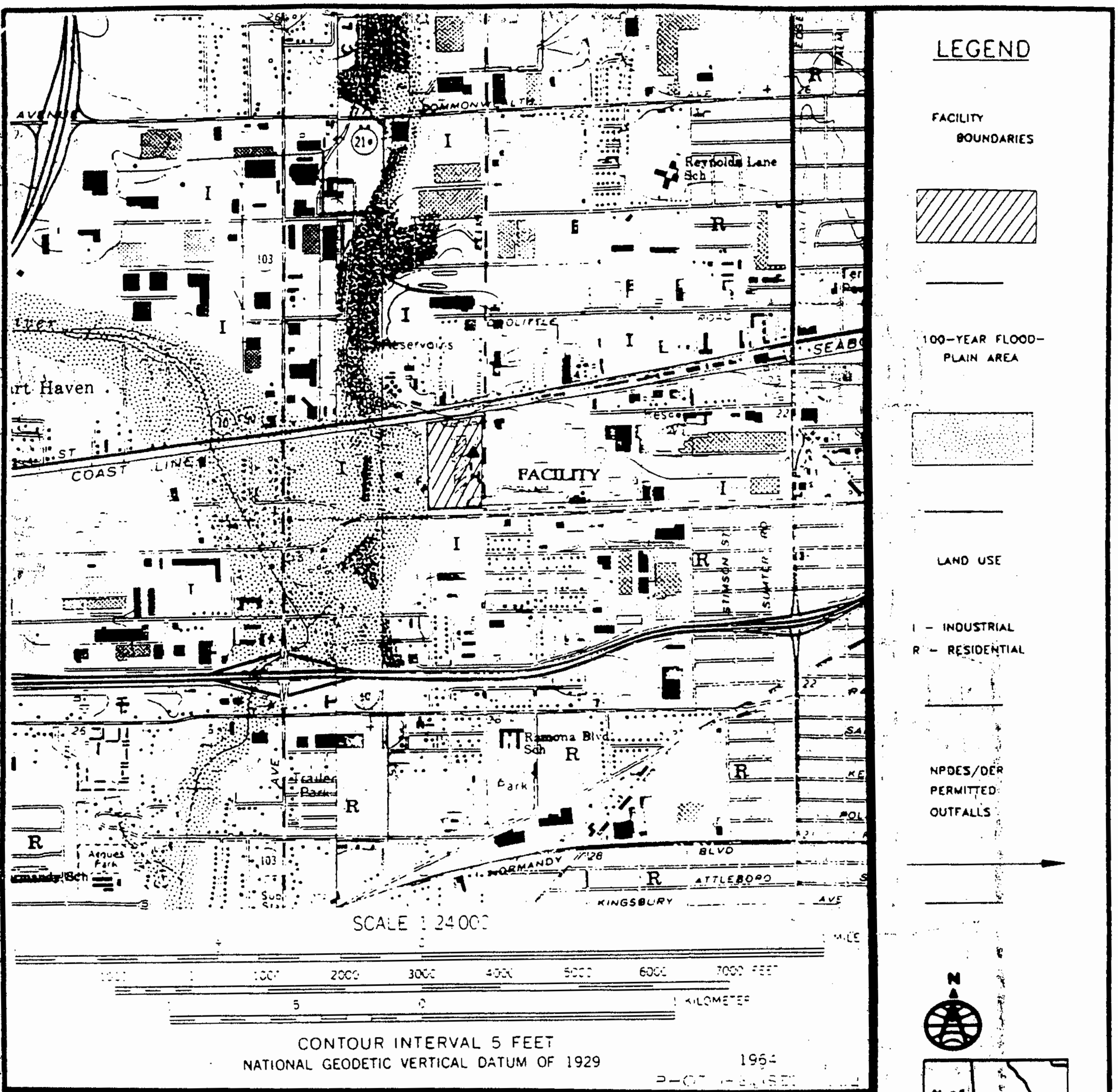
According to Dura-Bond's RCRA Closure Permit Application, the Dura-Bond site was originally developed in the late 1950s by Bushnell Steel Company. A deed dated January 13, 1955 indicates that the property was purchased by Bushnell Steel from Seaboard Air Line Railroad Company. Florida Steel Corporation purchased the property from Bushnell Steel (deed dated January 30, 1958) an conducted steel fabrication operations (which reportedly involved the use of lead-based and solvent-based paints) at the facility until it was purchased by Fab Steel Company of Florida on December 30, 1982. Fab Steel also conducted some coating operations, reportedly in the yard area and in the main facility building. Fab Steel apparently used the yard area to store large beams and other steel products (Reference 92).

Figure II-1

Topographic Map Showing Location of Dura-Bond Facility



(Reference 99)



MODIFIED FROM USGS 7-1/2 ' TOPOGRAPHIC QUADRANGLE.

Figure II-2

Topographic Map Showing Area Extending
One Mile Beyond the Property Boundaries of the Property
(Reference 92)

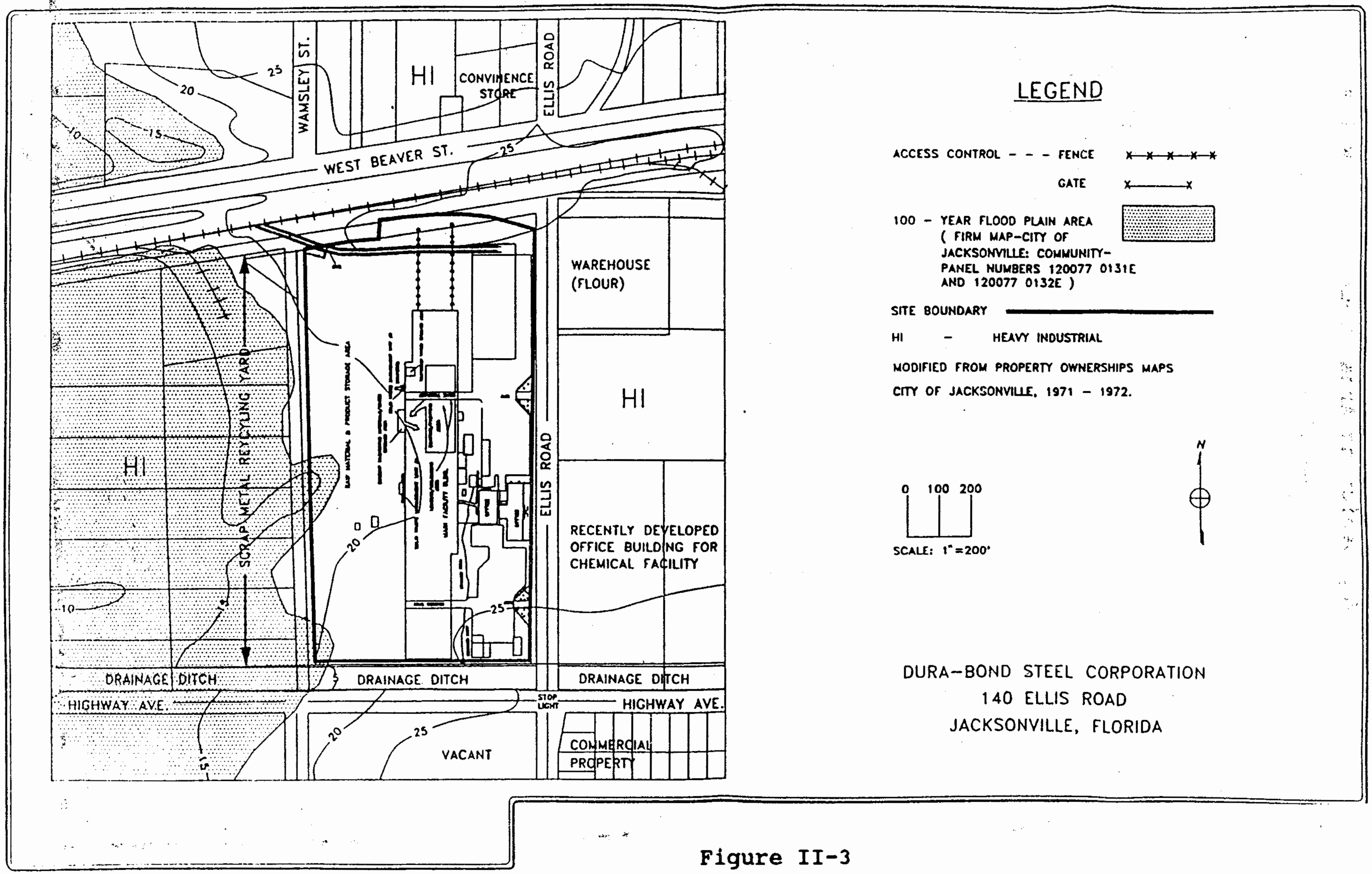
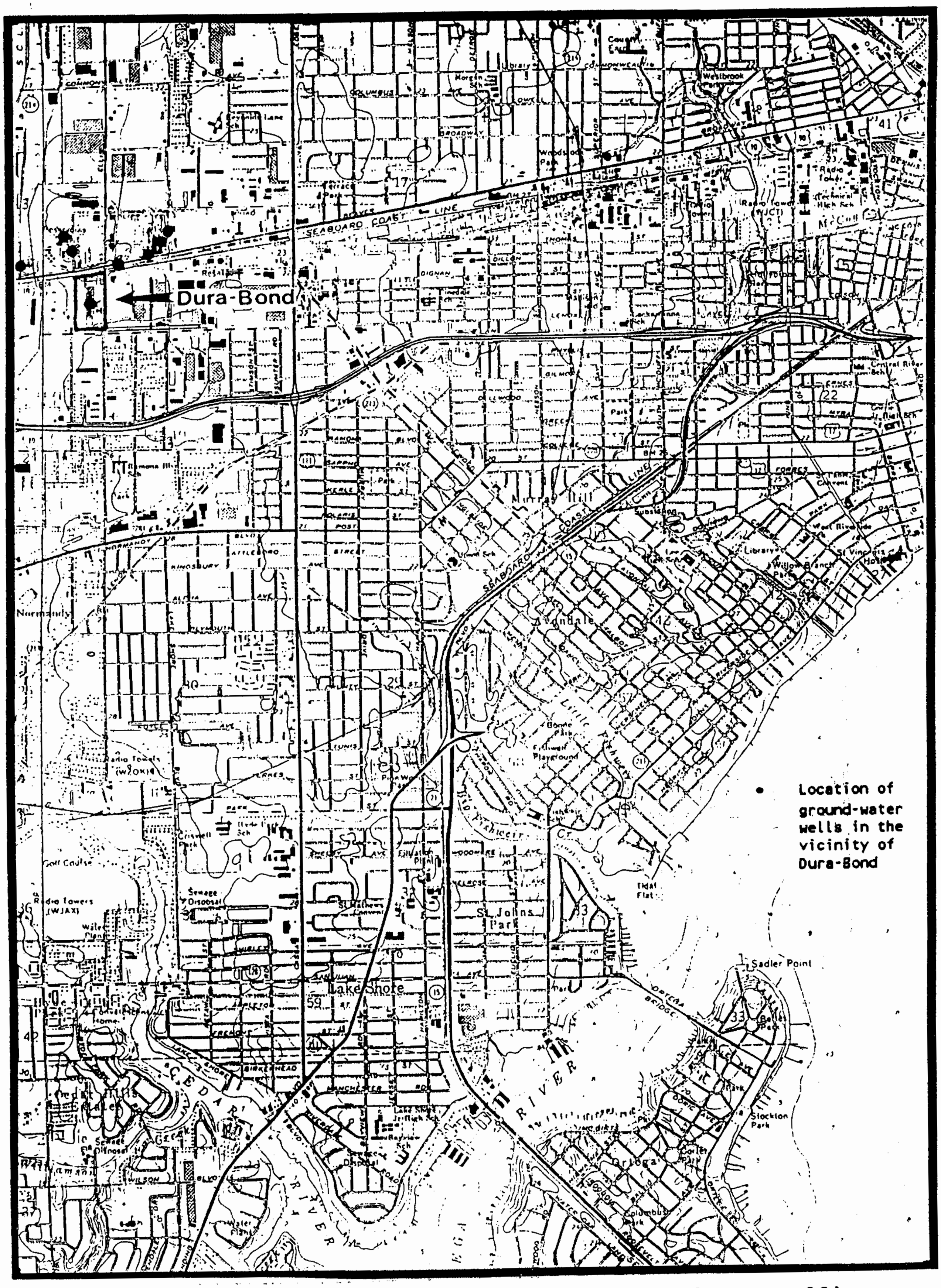


Figure II-3

Site Location Map
(Reference 92)

Figure II-4

Map Depicting Area Ground-Water Wells



(Reference 99)

Blank Page

The facility's RCRA Closure Permit Application indicates Dura-Bond Protective Coating Company, Inc. took title to the property on February 20, 1987 under a Trustee's Deed from the bankruptcy trustee of the estate of Fab Steel (Reference 92). In January 1991, Dura-Bond Protective Coating Company, Inc. changed its name to Dura-Bond Steel Corporation and continued its steel coating operations at the facility (Reference 33). On March 1, 1992, Balfour Beatty Construction, Inc. began leasing the property. Balfour Beatty's site operations involve structural steel operations, including sandblasting, welding, and minor painting. According to Mr. Elrod of Missimer and Associates, Dura-Bond is no longer operating the site (Reference 100).

The facility is regulated under an air emissions permit and as a Small Quantity Generator under a RCRA Hazardous Waste Facility Closure Permit, but it is unclear whether current Balfour operations require air permits (References 91, 92). The Dura-Bond facility was first noted as a hazardous waste handling facility during a FDER site inspection in October 1990. According to FDER, the site was inspected in response to a complaint alleging improper hazardous waste handling and disposal (Reference 20).

Hazardous waste generated at the facility consists of spent methyl ethyl ketone (MEK) solvent. MEK was used by Dura-Bond employees to clean paint from equipment and their spray paint guns. According to the 1990 FDER inspection report, the workers allegedly sprayed waste MEK/waste paint from their guns onto the ground in an Area Immediately Adjacent to the West Side of the Main Facility Building (SWMU 1). Dura-Bond also managed other used MEK solvent and paint sludge in 55-gallon drums in various waste storage areas, including the Temporary Waste Storage Area (SWMU 3), the Hazardous Materials/Waste Storage Area (SWMU 4), and the Historical Outside Storage Area (SWMU 9) (Reference 92).

On April 8, 1992, employees of Balfour Beatty unearthed several dozen unlabeled paint containers and residual paint while preparing to build a new road on the south side of the facility. This area is referred to as the Paint Cans Excavation Area (SWMU 12). The containers appeared to contain red lead primer paint (References 89, 90). According to Mr. Oliveros, Florida Steel representatives recognized this material as the kind of paint their employees had used on Department of Transportation projects (Reference 100). According to Mr. Elrod, the Paint Cans Excavation Area is near the former location of Florida Steel's paint shed in an area that was prone to washouts. Therefore these paint cans may have been used as a constituent of backfill material to prevent washouts. He also stated that there was no apparent order to the cans and old railroad ties were intermixed with the cans at the excavation area (Reference 100).

On the morning following the discovery of this disposal area, according to Mr. Elrod, the leaking cans were containerized (Reference 100). He also stated that Florida Steel is paying for the cleanup of this area (Reference 100). Given the proximity of the excavated paint cans to the Highway Avenue drainage ditch, as well as the presence of a seepage face along the northern edge of this ditch, it is highly likely that contamination from the paint cans has entered this drainage ditch.

Sampling results of the paint sludge using a flame ionization detector indicated contamination at the following levels: 270,000 to 540,000 ppm lead; 500,000 to 680,000 ppb ethylbenzene; 2,900,000 to 3,300,000 ppb total xylenes; 1,800,000 ppb toluene; 760,000 ppb MEK; 24 ppm barium; and 53 ppm selenium. Sampling results for the standing water (runoff) indicate contamination at the following levels: 12 ppm lead; 350 ppm chromium; 8,000,000 ppb ethylbenzene; 145,837 ppm total petroleum hydrocarbons; and 22,000,000 ppb total xylenes. Sampling results for the surrounding soil showed contamination at the following levels: 2,000 ppm lead; 120 ppm barium; 72 ppm chromium; 22,000 ppb MEK; 61,000 ppb acetone; 390,000 ppb ethylbenzene; 49,000 ppb toluene; and 220,000 ppb total xylenes (Reference 99). Sampling results are shown in Table III-1 on page III-27.

C. Process Description

The manufacturing processes described delow have occurred at the Dura-Bond facility since operations began in 1987. Balfour Beatty Construction, Inc. continues to operate some of these processes including the Wheelabrator® machine and outside sandblaster, and certain steel fabrication and welding operations. Balfour Beatty only performs minor painting operations; however, the company is constructing a large coating/painting facility building to the west of the main facility building in order to perform work for a large bridge contract (Reference 104).

1. Wheelabrator® Sandblaster, Outside Sandblaster, and Dust Collector

The coating and painting process began when materials which required finishing were blasted in a machine called a Wheelabrator®. This equipment removed millscale from the steel to provide a smooth surface for coating (Reference 20). In this unit steel shot and grit were fed into eight wheels that spun and delivered abrasives to the steel material. According to Mr. Norris, shot provided a more rounded surface to the steel materials, while grit provided a rougher surface (Reference 104). The Wheelabrator® sandblasting machine is located in the northeastern section of the main facility building.

According to Mr. Norris, steel materials which only required finishing and coating were unloaded from railroad cars entering the northern side of the facility or from trucks entering through the northern drive-through. These materials were brought into the main facility building through its open northern side, were sandblasted in the Wheelabrator®, and were passed along to the coating and painting area to the south. Materials that first required welding or fabrication were brought in through the southern drive-through or transported by overhead crane from the railroad tracks to the southern end of the main facility building. Here, the steel was formed into smaller angles in an area along the western wall or welded at welding units along the eastern wall. These materials were then transported to the northern end of the building where they were sandblasted before being moved south to the coating area. Tanks and other items that were too large to be treated in the Wheelabrator® were sandblasted outside the main facility building. Mr. Norris stated that Dura-Bond never blasted steel materials that were already coated (Reference 100).

Residual dust from the Wheelabrator® machine was mechanically removed from the machine through a baghouse which is part of the Wheelabrator® Dust Collector (SWMU 5). This unit is located adjacent to the outside eastern wall of the building. According to Mr. Norris, the dust from the dust collector emission control system contained worn shot, grit, and millscale, which was collected in 55-gallon drums (References 20, 104). This residual material was a dark gray colored dust that also dispersed to the concrete pad beneath the baghouse and the surrounding ground. The steel shot/grit and millscale residue was sold to Chatham Steel, the facility which conducts operations immediately west of the Dura-Bond property, to be recycled or was shipped offsite for disposal at a sanitary landfill (References 25, 27, 100, 104).

According to Mr. Norris, the outside sandblaster used an air blast system and a material referred to as Black Beauty™, which is a by-product of the combustion of coal that is processed into an abrasive product (Reference 101). It typically is composed of fused ferro-alumino-silicate which is formed when molten slag is quenched in cold water. The processed product is a course non-crystalline black glass. Black Beauty™ contains several hazardous constituents including antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, selenium, silver, thallium, vanadium, and zinc; therefore there is concern that Black Beauty™ could enter environmental media through runoff to surface water or leaching to ground water. If the confirmatory sampling reveals that hazardous constituents are present in the surrounding media, then further investigation of the unit is warranted.

The residue from the operation of the outside sandblaster was composed of rust millscale and sand (Reference 104). Some sandblast residue was used as fill in the marshy area between the main facility building and the northern warehouse known as the Sandblast Residue Fill Area (SWMU 8). Residue that fell to the ground during blasting operations was also graded in the surrounding area on the western side of the property or gathered in a pile northwest of the outside sandblaster in the Sandblast Area (SWMU 16) (Reference 100).

2. Coating/Painting Area

According to FDER, coating and painting operations took place within the main facility building, which is a long narrow building with a dirt floor. However, Dura-Bond states that the coating process took place only on either side of the northern driveway. Primer and/or finish coatings of paint were applied to tanks and pilings but only a primer coat was applied to structural steel materials. This primer paint contained inorganic zinc. Tanks were coated with a primer and polyurethane. Pilings were coated with a coal tar epoxy which was the most widely used coating material at the facility (References 57 and 62).

Steel fabricating operations occurred in the remainder of the building and occupied approximately 75% of the space. Dura-Bond has indicated that only 20% to 30% of the total area in the building had a dirt floor (i.e., reportedly only the extreme northern and southern sides of the northern driveway had dirt floors) (Reference 27). Hazardous waste was generated in this area from the use of pure MEK as a solvent. Mr. Waters told FDER officials during an October 1990 inspection that the facility generated approximately one 55-gallon drum of the F005 MEK waste each month. These waste drums and other containers were stored near the coating/painting area.

At the time of the inspection FDER inspectors reported that employees cleaned their paint guns using MEK and sprayed the F005 mixed MEK/paint waste directly onto the ground. The report states: "A tour of the coating/painting area revealed that employees routinely cleaned their paint guns and sprayed the F005 waste MEK/waste paint on the ground. There were several locations where this occurred. Both the soil and the vegetation in these areas were stained with the F005 waste MEK/waste paint mixture" (Reference 20).

The FDER October 1990 inspection report also stated that some of the drums that were observed in the Blue Shed (SWMU 10) appeared to have contained fiberglass resin from a former manufacturing process (Reference 20). FRP Supply, a distributor of Koppers brand 6631-T resin, stated that Dura-Bond purchased 189 drums of this material during the time that FRP had 2 batches of the resin in stock (Reference 9).

3. Area Adjacent to West Side of Main Facility Building (SWMU 1)

This area was identified as a SWMU in a FDER warning notice, following a Hazardous Waste Facility Inspection in October 1990. In Dura-Bond's Closure Permit Application, a unit which runs parallel to the western side of the main facility building (near a small storage building) was designated as a hazardous materials/waste storage area. Apparently, this area was used as a drum storage facility for MEK product and waste. FDER noted that there were several drums accumulating in this area at the time of the inspection and that many of the drums were open. Some of the drums were leaking or overflowing, and the surrounding soil was stained (Reference 20).

The area is composed of an abutment of the main facility building (measuring 15 feet by 40 feet) with a concrete floor. The walls consist of corrugated sheet metal. According to John Elrod, this area housed drums of MEK product after it was unloaded onto the pad from delivery trucks. A distillation unit, which distilled five to six gallons of MEK per hour for reuse from the mixed paint and solvent solution, was also once located in this area (Reference 100). Paint solids were allowed to settle out of spent MEK prior to distillation (Reference 92). Paint sludge from this process was accumulated in drums along the south side of the area.

D. Waste Management Practices

The primary units in Dura-Bond's waste management system were the temporary waste storage area and a storage area for both hazardous raw materials and hazardous waste. Details concerning the production and disposal of wastes which were produced at the Dura-Bond facility are provided below:

1. Chemical Wastes

Dura-Bond produced MEK wastes at the facility from 1987 to 1992. MEK was used as a cleaning solvent by facility workers to clean paint from their paint guns and equipment (Reference 20). Mr. Elrod stated that the frequency of cleaning out the paint guns in this manner depended on the type of paint being used in the coating and painting process. If workers were coating with a paint that only MEK could clean, then cleaning activities might occur on a daily basis (Reference 100). This waste is classified as F005 according to 40 CFR Part 261.31.

During an October 1990 site inspection, Mr. Waters, a production manager, told FDER officials that the facility generated approximately one 55-gallon drum of F005 mixed MEK/paint waste a month (Reference 20). According to Dura-Bond's Closure Permit Application, the waste was containerized in 55-gallon drums and transferred to the Hazardous Materials/Waste Storage Area (SWMU 4). Mr. Norris stated that this spent solvent was reusable after distillation. Solids were allowed to settle out and the MEK was distilled using a drum master distilling machine (References 92, 100). The distilled solvent was reused as thinner to generate new paint. Therefore the only waste being generated, according to Mr. Elrod, was the paint sludge that gradually accumulated. During the VSI, he estimated that three to five 55-gallon drums of waste were generated per month (Reference 100).

Dura-Bond had its hazardous waste collected and transported for disposal by Chemical Conservation Corporation (Chem Con), according to Mr. Norris (Reference 100). Chem Con disposed of the waste at its facility in Valdosta, Georgia (Reference 23, 34). According to Dura-Bond, xylene was declared as F003 hazardous waste when it was used around 1988 (Reference 100). From January 1989 to February 1990, Dura-Bond classified the waste being transported for disposal by Chem Con as PRO4114 waste mixed solvent, a flammable liquid, and PRO4132 waste oil on its Uniform Hazardous Waste Manifest sheets (Reference 34).

The April 22, 1991 Uniform Hazardous Waste Manifests indicate that Chem Con shipped 26 drums of waste paint from the Dura-Bond facility. Nineteen of these drums contained a mixture of methanol and mineral spirits and the other seven contained a mixture of xylene and methanol. All of the drums were classified as D001 flammable liquid on the Uniform Hazardous Waste Manifest sheets (Reference 50). There is no information available regarding how these wastes were generated or stored. Shipments of 17 drums on April 24, 1992 and 13 drums on May 7, 1992 consisted of 55-gallon drums of mixed paint/solvent waste as well as some non-regulated waste dirt, oil, and water (Reference 94).

In 1991, it was estimated that 17,026 pounds of volatile organic constituents (VOCs) were used in the coating/painting process at the Dura-Bond facility (Reference 57). In late January 1992, Dura-Bond estimated that its VOC emissions for a three month period equalled 5.24 tons. The company predicted that if this figure was extrapolated for a 12 month period, it could anticipate an annual VOC emission output of approximately 21 tons (Reference 84).

During an October 1990 inspection, FDER representatives noted that many of the drums in the storage areas were open, leaking or overflowing (Reference 20). Dura-Bond submitted an initial inventory of drums being stored onsite to FDER on January 18, 1991. All but 15 drums were characterized as product by Dura-Bond. Dura-Bond further stated that, in the future, any drums which stored hazardous waste would be closed except when waste was being added or removed and that hazardous waste drums would be inspected on a weekly basis. The facility also stated that any leaking drums would be recontainerized (Reference 30).

Dura-Bond submitted a revised inventory list on January 22, 1991 showing new and consolidated drums from the one- and five-gallon containers stored on the west side of the facility (Reference 31). This inventory is provided in Table II-1. Another updated inventory of all 55-gallon drums still located onsite was provided to FDER on March 22, 1991. A copy of this inventory is provided in Table II-2. This inventory indicates that some drums contained solvent and paint resin which were listed as hazardous waste. Several drums contained dust from the Wheelabrator® machine which was sold to Chatham Steel in early February 1991. Many other drums contained shot and grit. There were also some drums which contained hardened paint and other drums contained materials listed as product, including coating chemicals, oil, blue paste, and Wheelabrator® dust. One drum was also listed as containing material "From Oil Release" which was sold to Bob Matthews Construction in January 1991. Another drum was listed as containing "Oil Soaked Sorbent." No other information is available regarding any release of oil at the facility which may have produced the contents of these drums (References 48, 49).

2. <u>Waste Rags</u>

Mr. Waters told FDER inspectors during their October 1990 site visit that employees disposed of F005 waste MEK/paint rags (used in the cleaning of the spray guns during the coating and painting process) in the dumpster (Reference 20).

In January 1991, Dura-Bond issued a request for the supply and processing of approximately 1000 waste rags contaminated with MEK, solvents, and paint to Industrial Services in Plant City, Florida. The service was requested on a monthly basis for a period of six months (Reference 29).

3. <u>Wheelabrator® Dust Collector/Outside Sandblaster Residue</u>

Residual dust from the Wheelabrator® machine was mechanically removed from the machine through a baghouse which was part of the Wheelabrator® Dust Collector (SWMU 5). This unit is located adjacent to the outside eastern wall of the building. The dust from the dust collector emission control system contained worn shot, grit, and millscale, according to Mr. Norris, and was collected in 55-gallon drums (References 20, 104). Dura-Bond stated that all of the drums were "steel shot or steel grit" (Reference 36). The residual material was a dark gray colored dust that also dispersed to the concrete pad beneath the baghouse and the surrounding ground. The steel shot/grit and millscale residue was sold to Chatham Steel, the facility which conducts operations immediately west of Dura-Bond property, to be

Table II-1

Inventory of 55-Gallon Drums
Stored at Dura-Bond Facility
January 22, 1991

Dura-Bond Steel Corp.

STRUCTURAL STEEL
MISCELLANEOUS STEEL
REINFORCING STEEL
METAL DECK
STEEL JOIST
WELDED WIRE FABRIC

.OX 60937, 140 S. ELLIS • JACKSONVILLE, FLORIDA 32236-0937
Phone (904) 781-0898

Table II-1

Inventory of 55-Gallon Drums
Stored at Dura-Bond Facility January 22, 1991
(Reference 31)

10	AEON 800 PETROLEUM BASED LUBRICANT AND COOLANT
11	SAME AS #10
12	SAME AS #10
13	SAME AS #10
14	SAME AS #10
15	SAME AS #10
16	SAME AS #10
17	SAME AS #10
18	SAME AS #10
19	SAME AS #10
20	OIL SATURATED SAND BARRELL
21	SAME AS #20
22	SAME AS #20
23	SAME AS #20
24	SAME AS #20
25	SAME AS #20
26	EMPTY PLASTIC BARRELL. (RETURN FOR CREDIT)
27	CLORINE BARRELL IN PUMP HOUSE FOR USE H_2O.
28	HYDRAULIC OIL
29	SAME AS #28
30	SOILD PAINT
31	RED OXIDE PRIMER

Dura-Bond Steel Corp.

STRUCTURAL STEEL
MISCELLANEOUS STEEL
REINFORCING STEEL
METAL DECK
STEEL JOIST
WELDED WIRE FABRIC

P.O. BOX 60937, 140 S. ELLIS • JACKSONVILLE, FLORIDA 32236-0937
Phone (904) 781-0898 Fax (904) 781-2004

JANUARY 15. 1991

DANNY WATERS
EPA COORDINATOR.

INVENTORY OF ALL 55 GALLON DRUMS.

32	RED OXIDE PRIMER	
33	AMOCO CLEAR LUBE #90 OIL	
34	HYDRAULIC OIL	
35	AUTOMATIC TRANSMISSION OIL	
36	HARD PAINT	
37	SOLVENT	COMBINE WITH DRUM # 234. 1/15/91. DANNY WATERS
38	SOLVENT	
39	SOLVENT	COMBINE WITH DRUM # 237. 1/15/91. DANNY WATERS
40	SOLVENT	COMBINE WITH DRUM # 236. 1/15/91. DANNY WATERS
41	WATER SOLVENT	
42	WATER SOLVENT	
43	SOLVENT	
44	WATER SOLVENT	COMBINE WITH DRUM # 235. 1/15/91. DANNY WATERS
45	WATER	
46	SAND AND DIRT SOLVENT	
47	SAND AND DIRT SOLVENT	
48	SOLVENT	COMBINE WITH DRUM # 237. 1/15/91. DANNY WATERS
49	CORE COAT URTHANE	
50	HARD PAINT	
51	SOLVENT	COMBINE WITH DRUM # 234. 1/15/91. DANNY WATERS
52	CORE COAT URTHANE	
53	OIL	
54	SOLVENT	COMBINE WITH DRUM # 236. 1/15/91. DANNY WATERS
55	SOLVENT	COMBINE WITH DRUM # 235. 1/15/91. DANNY WATERS
56	SOLVENT	
57	OIL	
58	HYDRAULIC OIL	
59	SOLID PAINT	
60	COAL TAR THINNER	
61	MOTOR OIL	
62	ABSORBENT MATRRIAL	
63	LUBE GREASE	

Table II-1 (continued)

Dura-Bond Steel Corp.

STRUCTURAL STEEL
MISCELLANEOUS STEEL
REINFORCING STEEL
METAL DECK
STEEL JOIST
WELDED WIRE FABRIC

BOX 60937, 140 S. ELLIS • JACKSONVILLE, FLORIDA 32236-0937
Phone (904) 781-0898 Fax (904) 781-2004

JANURAY 15. 1991

DANNY WATERS.

EPA COORDINATOR.

INVENTORY OF ALL 55 CALLON DRUMS.

64	SOLVENT	
65	SOLVENT	COMBINE WITH DRUM # 235. 1/15/91. DANNY WATERS
66	CORE COAT URATHANE	
67	SAME AS #66	
68	SOLVENT	
69	HARD PAINT	
70	FORM OIL RELEASE	
71	OIL SOAKED ABSORBENT	
72	HARD PAINT	
73	HYDRAULIC OIL	
74	PAINT RESIN	
75	SOLVENT	
76	SOLVENT	
77	SOLVENT	COMBINE WITH DRUM # 238. 1/15/91. DANNY WATERS
78	PRC CHEM FRUTRON	
79	CORE COTE URTHANE	
80	SAME AS #79	
81	DIRT AND SAND SOLVENT	
82	SAME AS #81	
83	SOLVENT	
84	PAINT COLOR SANDSTONE	
85	CORE COAT URTHANE	
86	SOLVENT	

Table II-1 (continued)

Dura-Bond Steel Corp.

STRUCTURAL STEEL
MISCELLANEOUS STEEL
REINFORCING STEEL
METAL DECK
STEEL JOIST
WELDED WIRE FABRIC

P.O. BOX 60937, 140 S. ELLIS • JACKSONVILLE, FLORIDA 32236-0937
Phone (904) 781-0898 Fax (904) 781-2004

JANUARY 15. 1991

DANNY WATERS.
EPA COORINATOR.

INVENTORY OF ALL 55 GALLON DRUMS.

87	HYDRAULIC OIL	
88	SOLVENT	COMBINE WITH DRUM # 235. 1/15/91.DANNY WATERS
89	SOLID PAINT	COMBINE WITH DRUM# 234. 1/15/91. DANNY WATERS
90	GREY PRIMER	
91	DIRT AND SAND SOLVENT	
92	CORE COAT URTHANE	
93	SAME AS #92	
94	SAME AS #92	
95	solvent	
96	KOPPERS JET SET PRIMER	
97	DIRT AND SAND SOLVENT	
~~98~~	EMPTY DRUM	
99	CORE COAT URTHANE	
100	KOPPERS JET SET PRIMER	
101	CORE COAT URTHANE	
102	SAME AS # 101	
103	HYDRAULIC OIL	
104	SAME AS # 103	
105	OIL	
106	OIL	
107	OIL	
108	NEW MEK NOT OPENED	
109	SAME AS # 108	
110	SAME AS # 108	
111	SAME AS # 108	
112	SOLVENT	
113	EMPTY DRUM	
114	KOPPERS COAL TAR	
115	SAME AS # 114	
116	SAME AS #114	
117	SAME AS # 114	
118	HYPOCHLOINATES H_2O WATER TREATMENT PLANT	

Table II-1 (continued)

Dura-Bond Steel Corp.

STRUCTURAL STEEL
MISCELLANEOUS STEEL
REINFORCING STEEL
METAL DECK
STEEL JOIST
WELDED WIRE FABRIC

O. BOX 60937, 140 S. ELLIS • JACKSONVILLE, FLORIDA 32236-0937
Phone (904) 781-0898 Fax (904) 781-2004

JANUARY 15. 1991

DANNY WATERS

EPA COORINATOR.

INVENTORY OF ALL 55 GALLON DRUMS.

119	WATER
120	SCRAP DRUM
121	SAME AS #120
122	DUST FROM WHEELABRITOR
123	SAME AS # 122
124	SAME AS #122
125	SAME AS #122
126	SAME AS #122
127	SAME AS #122
128	SAME AS #122
129	SAME AS #122
130	SAME AS # 122
131	SAME AS #122
132	SAME AS #122
133	SAME AS #122
134	SAME AS #122
135	SAME AS #122
136	SAME AS #122
137	SAME AS #122
138	SAME AS #122
139	SAME AS #122
140	SAME AS #122
141	HYDRAULIC OIL
142	GRIT AND SHOT
143	GRIT AND SHOT
144	SAME AS #122
145	SAME AS #122
146	KOPPERS COAL TAR
147	SAME AS #146
148	SAME AS #146
149	SAME AS #146
150	SAME AS #146

Table II-1 (continued)

Dura-Bond Steel Corp.

P.O. BOX 60937, 140 S. ELLIS • JACKSONVILLE, FLORIDA 32236-0937

Phone (904) 781-0898 Fax (904) 781-2004

STRUCTURAL STEEL
MISCELLANEOUS STEEL
REINFORCING STEEL
METAL DECK
STEEL JOIST
WELDED WIRE FABRIC

JANUARY 15, 1991

DANNY WATERS

EPA COORDINATOR.

INVENTORY OF ALL 55 GALLON DRUMS.

151	POLYEASTER GEL COAT BLUE
152	KOPPERS COAL TAR
153	SAME AS #152
154	SAME AS #152
155	SAME AS #152
156	SAME AS #151
157	HYDRAULIC OIL
158	DIRT AND SAND OIL
159	DUST FROM WHEELABRATTOR
160	SAME AS #159
161	SAME AS #159
162	SAME AS #159
163	SHOT AND GRIT
164	SHOT AND GRIT
165	DUST FROM WHEELABRATTOR
166	SAME AS #165
167	SAME AS #165
168	SAME AS # 165
169	SAME AS # 165
170	SAME AS # 165
171	SAME AS # 165
172	SAME AS #165
173	SAME AS #165
174	SAME AS #165
175	SAME AS #165
176	SAME AS #165
177	THOMPSONS WATER SEAL
178	DIESEL FUEL (PILING PRODUCTS)
179	MOTOR OIL (PILING PRODUCTS)
180	MOTOR OIL (PILING PRODUTTS)
181	MOTOR OIL (PILING PRODUCTS)
182	MOTOR OIL 30 WT

Table II-1 (continued)

Dura-Bond Steel Corp.

P.O. BOX 60937, 140 S. ELLIS • JACKSONVILLE, FLORIDA 32236-0937

Phone (904) 781-0898 Fax (904) 781-2004

STRUCTURAL STEEL
MISCELLANEOUS STEEL
REINFORCING STEEL
METAL DECK
STEEL JOIST
WELDED WIRE FABRIC

JANUARY 15. 1991

DANNY WATERS

EPA COORINATOR.

INVENTORY OF ALL 55 GALLON DRUMS.

183	SOLOABLE OIL
184	MOTOR OIL
185	HYDRAUILIC OIL

Table II-1 (continued)

Dura-Bond Steel Corp.

STRUCTURAL STEEL
MISCELLANEOUS STEEL
REINFORCING STEEL
METAL DECK
STEEL JOIST
WELDED WIRE FABRIC

.O. BOX 60937, 140 S. ELLIS • JACKSONVILLE, FLORIDA 32236-0937

Phone (904) 781-0898 Fax (904) 781-2004

DATE.JAN 15 1991.
DANNY WATERS.
EPA COORINATOR.

INVENTORY OF ALL 55 GALLON DRUMS.

186	WHEELABRAITOR DUST
187	SAME AS #186
188	SAME AS #186
189	SAME AS #186
190	SAME AS #186
191	SAME AS #186
192	SAME AS #186
193	SAME AS #186
194	SAME AS # 186
195	SAME AS # 186
196	SAME AS # 186
197	SAME AS #186
198	SAME AS #186
199	SAME AS #186
200	G-25 SHOT
201	SAME AS #200
202	SAME AS #200
203	SAME AS #200
204	SAME AS #200
205	SAME AS # 200
206	SAME AS # 200
207	SAME AS # 200
208	DIESEL OIL FOR TRUCK
209	SOLUABLE OIL
210	PASTE BLUE
211	PASTE BLUE
212	PASTE BLUE
213	PASTE BLUE
214	PASTE BLUE
215	PASTE BLUE
216	PASTE BLUE
217	PASTE BLUE

Table II-1 (continued)

Dura-Bond Steel Corp.

STRUCTURAL STEEL
MISCELLANEOUS STEEL
REINFORCING STEEL
METAL DECK
STEEL JOIST
WELDED WIRE FABRIC

P.O. BOX 60937, 140 S. ELLIS • JACKSONVILLE, FLORIDA 32236-0937
Phone (904) 781-0898 Fax (904) 781-2004

DATE JAN 15 1991
DANNY WATERS
EPA COORINATOR.

INVENTORY OF ALL 55 GALLON DRUMS

218	MOTOR OIL #40
219	MIXED PAINT
220	SAME AS #219
221	SAME AS # 219
222	SAME AS # 219
223	PAINT CAN's PUT IN 55GALLON DRUM' 1-GALLON CAN'S. 1/15/91 DANNY WATERS
224	SAME AS #223
225	SAME AS #223
226	SAME AS #223
227	SCRAP STEEL
228	SAME AS #227
229	SAME AS # 227
230	SAME AS # 227
231	RAG DRUM
232	SAME AS # 231
233	SAME AS # 231
234	MIXED PAINT. COMBINE DRUM'S #89-37-51. DANNY WATERS 1/15/91
235	MIXED PAINT. COMBINE DRUM'S #65-55-44-88. DANNY WATERS 1/15/91
236	MIXED PAINT. COMBINE DRUM'S #40-54. DANNY WATERS 1/15/91
237	MIXED PAINT. COMBINE DRUM'S #48-39. DANNY WATERS 1/15/91
238	MIXED PAINT. COMBINE DRUM'S #77. DANNY WATERS 1/15/91
239	EMPTY DRUM

Table II-2

Inventory of 55-Gallon Drums
Stored at Dura-Bond Facility
March 22, 1991

D.K

Dura-Bond Steel Corp.

.OX 60937, 140 S. ELLIS • JACKSONVILLE, FLORIDA 32236-0937
Phone (904) 781-0890

STRUCTURAL STEEL
MISCELLANEOUS STEEL
REINFORCING STEEL
METAL DECK
STEEL JOIST
WELDED WIRE FABRIC

Table II-2

Inventory of 55-Gallon Drums Stored at Dura-Bond Facility March 22, 1991 (Reference 48)

DATE 3/20/91
DANNY WATERS.
EPA COORDINATOR.

PRODUCT	10	AEON 800 PETROLEUM BASED LUBRICANT AND COOLANT
PRODUCT	11	SAME AS #10
PRODUCT	12	SAME AS #10
PRODUCT	13	SAME AS #10
PRODUCT	14	SAME AS #10
PRODUCT	15	SAME AS #10
PRODUCT	16	SAME AS #10
PRODUCT	17	SAME AS #10
PRODUCT	18	SAME AS #10
PRODUCT	19	SAME AS #10
WASTE	20	OIL SATURATED SAND BARRELL
WASTE	21	SAME AS #20
WASTE	22	SAME AS #20
WASTE	23	SAME AS #20
WASTE	24	SAME AS #20
WASTE	25	SAME AS #20
PRODUCT	26	EMPTY PLASTIC BARRELL. (RETURN FOR CREDIT)
PRODUCT	27	CLORINE BARRELL IN PUMP HOUSE FOR USE H_2O.
PRODUCT	28	HYDRAULIC OIL
PRODUCT	29	SAME AS #28
WASTE	30	SOILD PAINT
PRODUCT	[illegible]	RED OXIDE PRIMER

Table II-2 (continued)

Dura-Bond Steel Corp.

P.O. BOX 60337, 140 S. ELLIS • JACKSONVILLE, FLORIDA 32236-0337

Phone (904) 781-0890 Fax (904) 781-2004

STRUCTURAL STEEL
MISCELLANEOUS STEEL
REINFORCING STEEL
METAL DECK
STEEL JOIST
WELDED WIRE FABRIC

DATE 3/20/91

DANNY WATERS
EPA COORDINATOR.

INVENTORY OF ALL 55 GALLON DRUMS.

PRODUCT	~~32~~	~~RED OXIDE PRIMER~~ USED TO SHIP STEEL TO JOB SITE 3/19/91
PRODUCT	33	AMOCO CLEAR LUBE #90 OIL
PRODUCT	34	HYDRAULIC OIL
PRODUCT	35	AUTOMATIC TRANSMISSION OIL
WASTE	36	HARD PAINT
EMPTY	~~37~~	~~SOLVENT~~ SEE DRUM#234 ~~COMBINE WITH DRUM # 234. 1/15/91.~~ DANNY WATERS
EMPTY	~~38~~	~~SOLVENT~~ USED AS PRODUCT
EMPTY	~~39~~	~~SOLVENT~~ SEE DRUM #237 ~~COMBINE WITH DRUM # 237. 1/15/91. DANNY WATERS~~
EMPTY	~~40~~	~~SOLVENT~~ SEE DRUM #236 ~~COMBINE WITH DRUM # 236. 1/15/91. DANNY WATERS~~
HAZ-WASTE	41	WATER SOLVENT
HAZ-WASTE	42	WATER SOLVENT
HAZ - WASTE	43	SOLVENT
EMPTY	~~44~~	~~WATER SOLVENT~~ SEE DRUM# 235 ~~COMBINE WITH DRUM # 235. 1/15/91. DANNY WATERS~~
PRODUCT	45	WATER USED TO SHIP STEEL TO JOB SITE 3/19/91
WASTE	46	SAND AND DIRT SOLVENT
WASTE	47	SAND AND DIRT SOLVENT
EMPTY	~~48~~	~~SOLVENT~~ SEE DRUM # 237 ~~COMBINE WITH DRUM # 237. 1/15/91. DANNY WATERS~~
PRODUCT	49	CORE COAT URTHANE
WASTE	50	HARD PAINT
EMPTY	~~51~~	~~SOLVENT~~ SEE DRUM # 234 ~~COMBINE WITH DRUM # 234 1/15/91~~ DANNY WATERS
PRODUCT	52	CORE COAT URTHANE
PRODUCT	53	OIL
MPTY	54	SOLVENT USED TO SHIP STEEL TO JOB SITE 3/19/91
MPRY	55	SOLVENT SEE DRUM # 235 COMBINE WITH DRUM # 235. 1/15/91. DANNY WATERS
AZ -WASTE	56	SOLVENT
RODUCT	57	OIL
RODUCT	58	HYDRAULIC OIL
ASTE	59	SOLID PAINT
RODUCT	60	COAL TAR THINNER
RODUCT	~~61~~	~~MOTOR OIL~~ #61 RETUNERD FOR CREDIT 2/4/91
RODUCT	62	ABSORBENT MATRIAL
RODUCT	63	LUBE GREASE

Table II-2 (continued)

Dura-Bond Steel Corp.

STRUCTURAL STEEL
MISCELLANEOUS STEEL
REINFORCING STEEL
METAL DECK
STEEL JOIST
WELDED WIRE FABRIC

P.O. BOX 60937, 140 S. ELLIS • JACKSONVILLE, FLORIDA 32236-0937
Phone (904) 781-0898 Fax (904) 781-2004

DATE 3/20/91

INVENTORY OF ALL #55GALLON DRUMS

DANNY WATERS
EPA COORINATOR

HAZ-WASTE	64	SOLVENT
EMPTY	65	SOLVENT SEE DRUM # 235
PRODUCT	66	CORE COAT URATHAN
PRODUCT	67	SAME AS # 66
HAZ -WASTE	68	SOLVENT
WASTE	69	HARD PAINT
PRODUCT	70	FORM OIL RELEASE. SOLD TO BOB MATHEWS CONSTRUCTION 1/14/91
WASTE	71	OIL SOAKED ABSORBENT
WASTE	72	HARD PAINT
PRODUCT	73	HYDRAULIC OIL
HAZ -WASTE	74	PAINT RESIN
HAZ-WASTE	75	SOLVENT
HAZ-WASTE	76	SOLVENT
EMPTY	77	SOLVENT SEE DRUM # 238
PRODUCT	78	PRO CHEM FRUTRON
PRODUCT	79	CORE COAT URATHAN
PRODUCT	80	SAME AS #79
WASTE	81	DIRT AND SAND SOLVENT
WASTE	82	SAME AS # 81
HAZ-WASTE	83	SOLVENT
PRODUCT	84	PAINT COLOR SANDSTONE
PRODUCT	85	CORE COAT URTHANE
HAZ-WASTE	86	SOLVENT

Table II-2 (continued)

Dura-Bond Steel Corp.

STRUCTURAL STEEL
MISCELLANEOUS STEEL
REINFORCING STEEL
METAL DECK
STEEL JOIST
WELDED WIRE FABRIC

P.O. BOX 50337, 140 S. ELLIS • JACKSONVILLE, FLORIDA 32236-0037
Phone (904) 781-0898 Fax (904) 781-2004

DATE 3/20/91

DANNY WATERS.
EPA COORDINATOR.

INVENTORY OF ALL 55 GALLON DRUMS.

PRODUCT	87	HYDRAULIC OIL
EMPTY	JCT88	SOLVENT SEE DRUM #235 ~~COMBINE WITH DRUM # 235. 1/15/91 DANNY WATERS~~
EMPTY	JCT89	~~SOLID PAINT~~ SEE DRUM #234 COMBINE WITH DRUM# 234. 1/15/91. DANNY WATERS
PRODUCT	90	GREY PRIMER
WASTE	JCT91	DIRT AND SAND SOLVENT
PRODUCT	92	CORE COAT URTHANE
PRODUCT	93	SAME AS #92
PRODUCT	94	SAME AS #92
EMPTY	~~JCT95~~	~~solvent~~ USED TO SHIP STEEL TO JOB SITE 3/19/91
PRODUCT	96	KOPPERS JET SET PRIMER
WASTE	JCT97	DIRT AND SAND SOLVENT
PRODUCT	98	EMPTY DRUM USED TO SHIP STEEL TO JOB SITE 3/19/91
PRODUCT	99	CORE COAT URTHANE
PRODUCT	100	KOPPERS JET SET PRIMER
PRODUCT	101	CORE COAT URTHANE
PRODUCT	102	SAME AS # 101
PRODUCT	103	HYDRAULIC OIL
PRODUCT	104	SAME AS # 103
PRODUCT	105	OIL
PRODUCT	106	OIL
PRODUCT	107	OIL
PRODUCT	108	NEW MEK NOT OPENED
PRODUCT	109	SAME AS # 108 USED TO SHIP STEEL TO JOB SITE 3/19/91
PRODUCT	110	SAME AS # 108 USED TO SHIP STEEL TO JOB SITE 3/19/91
PRODUCT	111	SAME AS # 108 USED TO SHIP STEEL TO JOB SITE 3/19/91
HAZ-WASTE	JCT 112	SOLVENT
PRODUCT	113	EMPTY DRUM USED TO SHIP STEEL TO JOB SITE 3/19/91
PRODUCT	114	KOPPERS COAL TAR
PRODUCT	115	SAME AS # 114
PRODUCT	116	SAME AS #114
PRODUCT	117	SAME AS # 114
PRODUCT	[illegible]	

Table II-2 (continued)

Dura-Bond Steel Corp.

STRUCTURAL STEEL
MISCELLANEOUS STEEL
REINFORCING STEEL
METAL DECK
STEEL JOIST
WELDED WIRE FABRIC

O. BOX 60937, 140 S. ELLIS • JACKSONVILLE, FLORIDA 32236-0937
Phone (904) 781-0898 Fax (904) 781-2004

DATE 3/20/91
DANNY WATERS
EPA COORDINATOR.

INVENTORY OF ALL 55 GALLON DRUMS.

PRODUCT	119	WATER EMPTY USED TO SHIP STEEL TO JOB SITE 3/19/91	
PRODUCT	120	SCRAP DRUM	
PRODUCT	121	SAME AS #120	
PRODUCT	122	DUST FROM WHEELABRITTOR	SOLD TO CHATHAM STEEL 2/1/91
PRODUCT	123	SAME AS # 122	SAME AS # 122
PRODUCT	124	SAME AS #122	SAME AS #122
PRODUCT	125	SAME AS #122	SAME AS #122
PRODUCT	126	SAME AS #122	
PRODUCT	127	SAME AS #122	SAME AS #122
PRODUCT	128	SAME AS #122	SAME AS # 122
PRODUCT	129	SAME AS #122	SAME AS # 122
PRODUCT	130	SAME AS # 122	SAME AS # 122
PRODUCT	131	SAME AS #122	SAME AS # 122
PRODUCT	132	SAME AS #122	SAME AS # 122
PRODUCT	133	SAME AS #122	SAME AS # 122
PRODUCT	134	SAME AS #122	SAME AS # 122
PRODUCT	135	SAME AS #122	SAME AS # 122
PRODUCT	136	SAME AS #122	SAME AS # 122
PRODUCT	137	SAME AS #122	SAME AS # 122
PRODUCT	138	SAME AS #122	SAME AS # 122
PRODUCT	139	SAME AS #122	SAME AS # 122
PRODUCT	140	SAME AS #122	SAME AS #122
PRODUCT	141	HYDRAULIC OIL	
PRODUCT	142	GRIT AND SHOT	
PRODUCT	143	GRIT AND SHOT	
PRODUCT	144	SAME AS #122	
PRODUCT	145	SAME AS #122	
PRODUCT	146	KOPPERS COAL TAR	
PRODUCT	147	SAME AS #146	
PRODUCT	148	SAME AS #146	
PRODUCT	149	SAME AS #146	
PRODUCT	150	SAME AS #146	

Dura-Bond Steel Corp.

P.O. BOX 50337, 140 S. ELLIS • JACKSONVILLE, FLORIDA 32236-0037

Phone (904) 781-0898 Fax (904) 781-2004

STRUCTURAL STEEL
MISCELLANEOUS STEEL
REINFORCING STEEL
METAL DECK
STEEL JOIST
WELDED WIRE FABRIC

DATE 3/20/91

DANNY WATERS

EPA COORDINATOR.

INVENTORY OF ALL 55 GALLON DRUMS.

RODUCT	151	POLYMASTER OIL COAT BLUE
RODUCT	152	KOPPERS COAL TAR
RODUCT	153	SAME AS #152
RODUCT	154	SAME AS #152
RODUCT	155	SAME AS #152
RODUCT	156	SAME AS #151
RODUCT	157	HYDRAULIC OIL
ASTE	158	DIRT AND SAND OIL
OLID	159	DUST FROM WHEELABRATTOR
OLID	160	SAME AS #159
OLID	161	SAME AS #159
OLID	162	SAME AS #159
OLID	163	SHOT AND GRIT
OLID	164	SHOT AND GRIT
OLID	165	DUST FROM WHEELABRATTOR
OLID	166	SAME AS #165
OLID	167	SAME AS #165
OLID	168	SAME AS # 165
OLID	169	SAME AS # 165
OLID	170	SAME AS # 165
OLID	171	SAME AS # 165
OLID	172	SAME AS #165
OLID	173	SAME AS #165
OLID	174	SAME AS #165
OLID	175	SAME AS #165
OLID	176	SAME AS #165
OLID	177	THOMPSONS WATER SEAL
ODUCT	178	DIESEL FUEL (PILING PRODUCTS)
ODUCT	179	MOTOR OIL (PILING PRODUCTS)
ODUCT	180	MOTOR OIL (PILING PRODUCTS)
ODUCT	181	MOTOR OIL (PILING PRODUCTS)
ODUCT	182	MOTOR OIL 30 WT

Table II-2 (continued)

Dura-Bond Steel Corp.

STRUCTURAL STEEL
MISCELLANEOUS STEEL
REINFORCING STEEL
METAL DECK
STEEL JOIST
WELDED WIRE FABRIC

P.O. BOX 60037, 140 S. ELLIS • JACKSONVILLE, FLORIDA 32236-0037
Phone (904) 781-0898 Fax (904) 781-2004

DATE 3/20/91

DANNY WATERS

EPA COORDINATOR.

INVENTORY OF ALL 55 GALLON DRUMS.

PRODUCT	183	SOLOABLE OIL	
EMPTY	184	MOTOR OIL	USED TO SHIP STEEL TO JOB SITE 3/19/91
PRODUCT	185	HYDRAUILIC OIL	

Table II-2 (continued)

Dura-Bond Steel Corp.

STRUCTURAL STEEL
MISCELLANEOUS STEEL
REINFORCING STEEL
METAL DECK
STEEL JOIST
WELDED WIRE FABRIC

P.O. BOX 60937, 140 S. ELLIS • JACKSONVILLE, FLORIDA 32236-0937
Phone (904) 781-0898 Fax (904) 781-2004

DATE 3/20/91
DANNY WATERS.
EPA COORDINATOR.

INVENTORY OF ALL 55 GALLON DRUMS.

SOLD	186	WHEELABRATOR DUST
SOLD	187	SAME AS #186
SOLD	188	SAME AS #186
SOLD	189	SAME AS #186
SOLD	190	SAME AS #186
SOLD	191	SAME AS #186
PRODUCT	192	SAME AS #186
SOLD	193	SAME AS #186
SOLD	194	SAME AS # 186
PRODUCT	195	SAME AS # 186
SOLD	196	SAME AS # 186
SOLD	197	SAME AS #186
PRODUCT	198	SAME AS #186
SOLD	199	SAME AS #186
EMPTY	200	G-25 SHOT
EMPTY	201	SAME AS #200
EMPTY	202	SAME AS #200
EMPTY	203	SAME AS #200
EMPTY	204	SAME AS #200
EMPTY	205	SAME AS # 200
EMPTY	206	SAME AS # 200
EMPTY	207	SAME AS # 200
PRODUCT	208	DIESEL OIL FOR TRUCK
PRODUCT	209	SOLUABLE OIL
PRODUCT	210	PASTE BLUE
PRODUCT	211	PASTE BLUE
PRODUCT	212	PASTE BLUE
PRODUCT	213	PASTE BLUE
PRODUCT	214	PASTE BLUE
PRODUCT	215	PASTE BLUE
PRODUCT	216	PASTE BLUE
PRODUCT	217	PASTE BLUE

Table II-2 (continued)

Dura-Bond Steel Corp.

P.O. BOX 60837, 140 S. ELLIS • JACKSONVILLE, FLORIDA 32236-0837

Phone (904) 781-0896 Fax (904) 781-2004

STRUCTURAL STEEL
MISCELLANEOUS STEEL
REINFORCING STEEL
METAL DECK
STEEL JOIST
WELDED WIRE FABRIC

DATE 3/20/91
DANNY WATERS
EPA COORDINATOR.

INVENTORY OF ALL #55 GALLON DRUMS

PRODUCT	218	MOTOR OIL #40
HAZ-WASTE	219	MIXED PAINT
HAZ-WASTE	220	SAME AS #219
HAZ-WASTE	221	SAME AS # 219
HAZ-WASTE	222	SAME AS # 219
HAZ-WASTE	223	PAINT CAN'S PUT IN 55GALLON DRUM' 1-GALLON CAN'S. 1/15/91 DANNY WATERS
HAZ-WASTE	224	SAME AS #223
HAZ-WASTE	225	SAME AS #223
HAZ-WASTE	226	SAME AS #223
SOLD	227	SCRAP STEEL
PRODUCT	228	SAME AS #227
PRODUCT	229	SAME AS # 227
SOLD	230	SAME AS # 227
PRODUCT	231	RAG DRUM
PRODUCT	232	SAME AS # 231
PRODUCT	233	SAME AS # 231
HAZ-WASTE	234	MIXED PAINT. COMBINE DRUM'S ~~#89-37-51~~ DANNY WATERS 1/15/91 — #89-37-51 ARE EMPTY
HAZ-WASTE	235	MIXED PAINT. COMBINE DRUM'S ~~#65-55-44-88~~ DANNY WATERS 1/15/91 — #65-55-44-88 ARE EMPTY
HAZ-WASTE	236	MIXED PAINT. COMBINE DRUM'S ~~#40-54~~ DANNY WATERS 1/15/91 — #40-54 ARE EMPTY
HAZ-WASTE	237	MIXED PAINT. COMBINE DRUM'S ~~#48-39~~ DANNY WATERS 1/15/91 — #48-39 ARE EMPTY
HAZ-WASTE	238	MIXED PAINT. COMBINE DRUM'S ~~#77~~ DANNY WATERS 1/15/91 — #77 IS EMPTY
EMPTY	239	EMPTY DRUM USED TO SHIP STEEL TO JOB SITE 3/19/91

Table II-2 (continued)

Dura-Bond Steel Corp.

P.O. BOX 60937, 140 S. ELLIS · JACKSONVILLE, FLORIDA 32236-0937

Phone (904) 781-0898 Fax (904) 781-2004

STRUCTURA
MISCELLANE
REINFORCIN
METAL DECK
STEEL JOIST
WELDED WIR

DATE 3/20/91

DANNY WATERS
EPA COORDINATOR

INVENTORY OF ALL #55GALLON DRUMS

PRODUCT	240	MEK DRUM EMPTY 2-20-91
EMPTY	241	MEK DRUM EMPTY 2-20-91 USED TO SHIP STEEL TO JOB SITE 3/19/91
EMPTY	242	MEK DRUM FULL 2-20-91 PRODUCT.USED TO SHIP STEEL TO JOB SITE 3/19/91
PRODUCT	243	MEK DRUM FULL 2-20-91 PRODUCT.
PRODUCT	244	MEK DRUM FULL 2-20-91 PRODUCT.
SOLD	245	STEEL SHOT.. SOLD TO CHATHAM STEEL 2-6-91 COPY HAS BEEN FAX TO YOU ON 2-7-91
SOLD	246	STEEL SHOT.. SOLD TO CHATHAM STEEL 2-6-91 COPY HAS BEEN FAX TO YOU ON 2-7-91
HAZ-WASTE	247	MIXED PAINT
HAZ-WASTE	248	MIXED PAINT
PRODUCT	249	MOTOR OIL SAE #40
HAZ-WASTE	250	MIXED PAINT
PRODUCT	251	SHREWIN WILLIAMS RED OXIDE PRIMER PRODUCT.

recycled, or it was shipped offsite for disposal at a sanitary landfill (References 25, 27, 100, 104). Dura-Bond estimated that it collected approximately twelve tons of this residue per year (Reference 22). In February 1991, Dura-Bond sold fifty-six drums of dust from the Wheelabrator® machine to Chatham Steel.

According to Mr. Norris, the outside sandblaster used an air blast system. He also told team members during the VSI that Black Beauty™ was used in this machine (Reference 101). Black Beauty™ is a by-product of the combustion of coal which is processed into an abrasive product. It typically is composed of fused ferro-alumino-silicate which is formed when molten slag is quenched in cold water. The end result is a course non-crystalline black glass. Black Beauty™ contains several hazardous constituents including antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, selenium, silver, thallium, vanadium, and zinc. There is concern that Black Beauty™ could enter environmental media through runoff to surface water or leaching to ground water. The residue from this machine was composed of rust millscale and sand (Reference 104). Select sand from the outside blasting area was used for fill in two fill areas (SWMUs 8 and 16) on the property (Reference 27). Some sandblast residue was used as fill in the marshy area between the main facility building and the north warehouse, and residue that fell to the ground during blasting operations was graded in the surrounding area on the western side of the property or gathered in a pile northwest of the outside sandblaster (Reference 100).

4. Construction Debris

According to Mr. Norris, Dura-Bond has attempted to have a concrete recycling service collect concrete debris that is primarily located in the two debris piles on the western edge of the property (SWMUs 17 and 21). However, he stated that no one has ever come to retrieve the debris for disposal (Reference 100).

5. Sanitary Wastewater

According to Mr. Norris, sanitary wastewater from the Dura-Bond property is discharged through the City of Jacksonville sewer system (Reference 100).

6. Used Oil

Mr. Norris stated that Dura-Bond never used the underground waste oil storage tank that was formerly located in the southeastern corner of the property. This waste oil tank was excavated and removed in July 1989 by Bill Johns Waste Oil Service of Jacksonville (References 99, 104). According to Mr. Norris, waste oil was stored in drums at the facility which were collected by Holloway Oil Company of Jacksonville for disposal

(Reference 100). During the VSI, at least one drum labeled as waste oil was observed near the Ramp Area (SWMU 7).

7. Scrap Metal

Some of Dura-Bond's scrap metal that was placed in a scrap metal bin has been sent to its neighbor, Chatham Steel (Reference 100). See D.3 above on page II-14 for more details.

8. General Facility Refuse

Office refuse, packaging, and shop wastes generated by Dura-Bond were collected in onsite roll-off containers supplied by Browning Ferris Industries (BFI). These units were emptied on a regular basis by BFI for disposal offsite. Paint containers were left open to air dry and then crushed and placed into the roll-off dumpster, according to the available file material (References 99, 100). Approximately 300 to 350 cubic feet of solid waste was accumulated in the roll-offs each month. Approximately half of the waste was reportedly composed of crushed paint cans (Reference 99).

9. Used Tires

Mr. Norris stated that the used tires that were observed during the VSI on June 25, 1992 throughout the property (either in separate piles or in the construction debris piles) were left by trucking operations at the site. They have been accumulating since Dura-Bond began operating at the property. He did not mention any waste management plans for the tires (Reference 100).

E. Regulatory History

This section presents the regulatory history of the facility, including any site investigations, RCRA and closure activities, along with information regarding any permits granted to the facility.

1. Previous Site Investigations

Numerous site investigations have been conducted at the Dura-Bond facility since 1990. These are detailed below along with other actions taken by Dura-Bond as part of the RCRA program.

2. RCRA Activities

EPA first became involved with the Dura-Bond site in 1988 when Dura-Bond Protective Coating Co. submitted a Notification of Hazardous Waste Activity to U.S. EPA for the generation of less than 1000 kilograms (kg) per month. It described its hazardous wastes from nonspecific sources as F003 and F005 wastes. In June 1988, FDER issued Dura-Bond a facility identification number and granted it status as a Small Quantity Generator (Reference 3).

The Dura-Bond facility was inspected on October 22, 1990 in response to a complaint alleging improper handling and disposal of hazardous waste. On December 5, 1990, FDER issued Warning Notice No. WN90-0216HW16NED to Dura-Bond citing violations of hazardous waste regulations (References 92, 47).

FDER assessed a civil penalty, stating that Dura-Bond was discharging hazardous waste consisting of paint solvents as a regular practice during its operations. FDER based its penalty on Dura-Bond's major violations of RCRA which involved discharging without a permit as part of an ongoing operation. FDER divided its penalties against Dura-Bond into ten areas. It listed each violation with a proposed penalty and justification. Among those violations noted at the Dura-Bond facility were the treatment, storage, or disposal of hazardous waste without a permit; lack of a closure plan; the land disposal of hazardous wastes without ground-water monitoring; lack of a contingency plan for use in the event of an accidental release of hazardous waste; the treatment, storage, or disposal of hazardous wastes without financial assurances; the treatment, storage, or disposal of hazardous wastes without notification; a lack of training for facility personnel; and a lack of arrangements with local authorities (Reference 21). A summary of the proposed penalties is provided in Table II-3.

In response to Dura-Bond's application for a FDER/EPA identification number, FDER assigned Dura-Bond the EPA I.D. Number FLD982168072 (Reference 43).

The Jacksonville Department of Health, Welfare & Bio-Environmental Services inspected Dura-Bond for air permitting requirements on January 11, 1991. Three sources of air pollutants were noted during the inspection including the steel shot abrasive blast booth (Wheelabrator®), the indoor and outdoor tank coating processes, and the open air sandblaster (Reference 25).

Based on a follow-up Hazardous Waste Site Inspection on February 9, 1991, Dura-Bond entered into Consent Order No. 90-0131 with FDER on March 5, 1991 in which Dura-Bond agreed to resolve the violations which had been documented in the first Hazardous Waste Inspection report, pay the penalties, and submit a closure permit application pursuant to its designation as a hazardous waste land disposal facility (References 47, 79). As part of the Consent Order and as recommended in the Hazardous Waste Inspection Report, Dura-Bond submitted six completed copies of FDER Permit Application Form 17-730.900(2) along with the application fee. As part of the corrective actions, Dura-Bond containerized all wastes and placed them in a designated Temporary Waste Storage Area (SWMU 3) onsite prior to offsite disposal by a properly

Table II-3
Summary of Proposed Penalties (Reference 21)

	REGULATION	VIOLATION	PENALTY	MATRIX	JUSTIFICATION
I.	40 CFR 262.11	Facility did not determine whether or not waste stored is hazardous.	22,500 Midpoint	Major potential for harm Major extent of deviation	Waste determination is essential to proper waste handling.
II.	FAC 17-730.240 FAC 17-4.080 40 CFR 264 Subpart N	Land disposal of hazardous waste without a permit.	22,500 Midpoint	Major potential for harm Major extent of deviation	No application made for permit.
III.	40 CFR 264 Subpart F	No groundwater monitoring program.	22,500 Midpoint	Major potential for harm Major extent of deviation	Hazardous waste routinely discharged to ground with no monitoring of the effect on groundwater.
IV.	40 CFR 264 Subpart G	No plans made for the removal of site contaminants.	22,500 Midpoint	Major potential for harm Major extent of deviation	Will delay the proper closure of the facility.
V.	40 CFR 264 Subpart H	Land disposal of hazardous wastes without financial assurances.	22,500 Midpoint	Major potential for harm Major extent of deviation	Extensive costs for permitting and cleanup with facility finances uncertain.
VI.	40 CFR 264 Subpart D	No plan for use in the event of an accidental release of hazardous wastes.	9,500 Midpoint	Moderate potential harm Major extent of deviation	No plan provided or attempted.
VII.	40 CFR 264.16	No training for facility personnel.	9,500 Midpoint	Moderate potential harm Major extent of deviation	Standard penalty for the failure to train personnel.
VIII.	40 CFR 264.37	No emergency arrangements with local authorities.	1,000 Midpoint	Minor potential harm Moderate extent of deviation	Standard penalty for the failure to make arrangements.
IX.	40 CFR 262.20 (a) and (b)	Facility disposing of F005 waste rags in the dumpster.	2,250 Midpoint	Minor potential harm Major extent of deviation	Only a small amount of F005 waste rags involved.
X.	40 CFR 265.173 40 CFR 265.174	Container requirements.	9,500 Midpoint	Moderate potential harm Major extent of deviation	Containers open, leaking.
		Total Penalty	$144,250		

licensed contractor. Dura-Bond also implemented an inventory system to track all wastes that were generated (Reference 92).

A follow-up Hazardous Waste Site Inspection of the facility was conducted by FDER on February 8, 1991. The inspection was conducted during a soil sampling event. The report noted that all of the drums containing hazardous waste had been closed, labeled, and dated. No additional violations were observed on the property (Reference 47).

Dura-Bond hired a private contractor to determine if there was any soil and ground-water contamination on the property where there had been alleged releases of hazardous waste. MEK/paint waste was allegedly discharged to the ground in an Area Adjacent to the West Side of the Main Facility Building (SWMU 1) and in an Area Immediately Adjacent to the Dumpster (SWMU 2). FDER officials noted the presence of approximately ten drums and numerous smaller containers around the Dumpster (Reference 20).

Soil sampling was performed by RSDI Environmental, Inc. in February 1991. The results showed a positive presence of MEK (Reference 44). A schematic showing the locations of the sampling areas is provided in Figure II-5. Borings 2 and 3 were located in the Area Adjacent to the West Side of the Main Facility Building (SWMU 1). The samples were analyzed for MEK using EPA Method 8015. The concentration of MEK in the soil at the southern end of SWMU 1 ranged from 12.80 to 18.20 milligrams per kilograms (mg/kg). The MEK concentration in the soil ranged from 17.30 mg/kg to 25.90 mg/kg mg/kg at the northern end of SWMU 1. Samples were also taken in the area Immediately Adjacent to the Dumpster (SWMU 2) - boring 4. The concentration of MEK in the soil ranged from 19.60 mg/kg to 19.70 mg/kg. The results from RSDI's February 1991 soil sampling are shown in Table II-4.

Ground-water sampling was performed in at least one location and soil sampling was performed in at least two locations (using EPA Test Method 8240 by Geraghty & Miller of Jacksonville in February 1991 (Reference 44). The results of this sampling are presented in Table II-5.

On June 27, 1991, containerized waste was sampled and analyzed for VOCs and RCRA metals. The results showed VOCs at the following levels: MEK 360,000 milligrams per liter (mg/l), toluene 14,000 mg/l, ethylbenzene 6,600 mg/l, and xylenes 29,000 mg/l. Results from metals analyses indicated detectable concentrations of barium 33 mg/l, cadmium 0.18 mg/l, chromium 58 mg/l, and lead 16 mg/l. According to Dura-Bond's Closure Permit Application, the organic constituents detected in the waste sample are consistent with the primary ingredients of the raw products which Dura-Bond used (Reference 92). The results are shown in Table II-6.

Figure II-5

Locations of Soil Sampling Areas for MEK
(Reference 44)

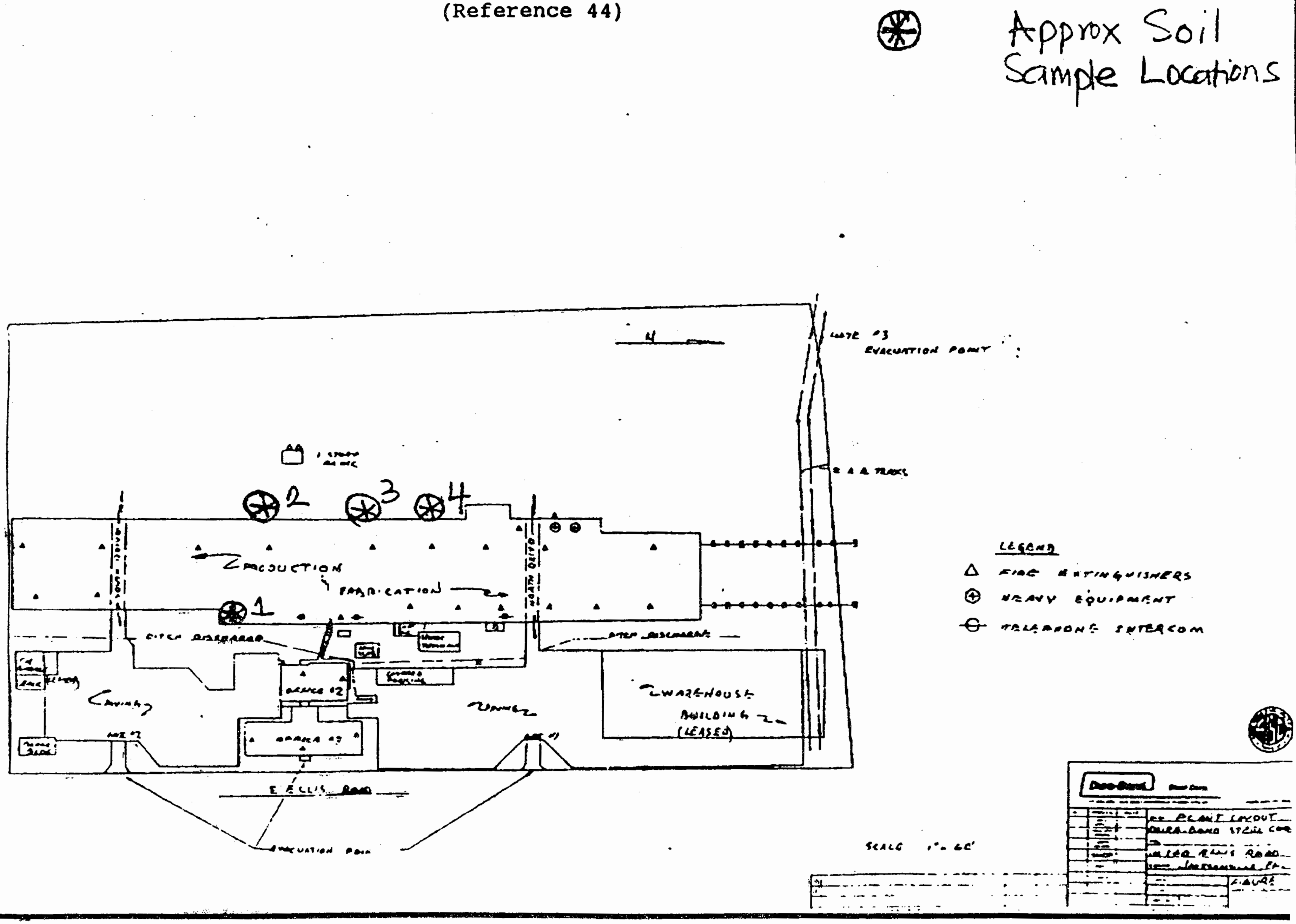


Table II-4

Soil Sampling Results for MEK

Table II-4

Soil Sampling Results for MEK
(Reference 42)

Telephone
(904) 725-2040
FAX
(904) 727-9720

SOUTHEASTERN CHEMISTS' LABORATORIES
P.O. Box 8917
Jacksonville, FL 32239

Laboratory Marks: Job # 31776   Date Of Analysis: February 14, 1991

Sample of: Soil

Client: RSDI Environmental 7820 Arlington Expy. Jacksonville, FL.

Analysis By: CG

QA/QC REPORT

Parameter	Duplicate Acceptance	Duplicate % RSD	Spike Acceptance	Spike % Recovery
2-Butanone	2.8-27.2	5.25%	59-155	101.3%

All samples analysed in accordance with EPA, ASTM, or other approved methods.

Respectfully submitted,

Charles M. Ged

Charles M. Ged
Laboratory Director
DER #9003840

CMG/jk

Telephone
(904) 725-2040
FAX
(904) 727-9720

SOUTHEASTERN CHEMISTS' LABORATORIES
P.O. Box 8917
Jacksonville, FL 32239

Laboratory Marks: Job # 31776 Date Received: February 8, 1991

Sample of: Soil

Client: RSDI Environmental 7820 Arlington Expy. Suite 600B
Jacksonville, FL

Sample Marks: 1-1 thru 1-3, 2-1 thru 2-3, 3-1, 3-2, 4-1 thru 4-3

CERTIFICATE OF ANALYSIS

Sample Marks	2-Butanone
1-1	20.90 mg/kg
1-2	17.50 mg/kg
1-3	18.00 mg/kg
2-1	18.20 mg/kg
2-2	12.80 mg/kg
2-3	17.10 mg/kg
3-1	17.30 mg/kg
3-2	25.90 mg/kg
4-1	19.70 mg/kg

Table II-4 (continued)

Telephone
(904) 725-2040
FAX
(904) 727-9720

SOUTHEASTERN CHEMISTS' LABORATORIES
P.O. Box 8917
Jacksonville, FL 32239

JOB 31776
PAGE 2

CERTIFICATE OF ANALYSIS

Sample Marks	2-Butanone
4-2	19.60 mg/kg
4-3	19.70 mg/kg
Rinsate Blank	<0.01 mg/l
Trip Blank	<0.01 mg/l

All samples analyzed in accordance with EPA, ASTM, or other approved methods.

Respectfully submitted,

Charles M. Ged

Charles M. Ged
Laboratory Director
DER #900384G

CMG/jk

Table II-5

Analysis of Soil and Ground Water
February 1991

IINARY FINAL DRAFT PRELIMINARY FINAL DRAFT

GERAGHTY & MILLER
8936 WESTERN WAY

JACKSONVILLE FL 32256-0000

Lab I.D.#:	91-1265A
Order Number:	P40018
Order Date:	02/26/91
Client:	07054
Sampled By:	R.F.M.
Sample Date:	02/21/91
Sample Time:	N/S

N/S = Not Submitted

roject Number:	JF-DURABOND
roject Name:	DURA BOND STEEL
ample Site:	140 S. ELLIS RD. - JAX
ample Type:	SOIL

R E S U L T S

reported on the following page(s)

Table II-5

Analysis of Soil and Groundwater
February 1991 (Reference 99)

NOT APPROVED, DRAFT ONL'

Approved By : ______________________

Table II-5 (continued)

AnalyticalTechnologies, Inc.

11 EAST OLIVE ROAD PHONE (904) 474-1001
PENSACOLA FLORIDA 32514

M ARY FINAL DRAFT PRELIMINARY FINAL DRAFT

GERAGHTY & MILLER
8936 WESTERN WAY

JACKSONVILLE FL 32256-0000

Lab I.D.#:	91-1265B
Order Number:	P40017
Order Date:	02/26/91
Client:	07054
Sampled By:	R.F.M.
Sample Date:	02/21/91
Sample Time:	N/S

N/S = Not Submitted

Project Number: JF-DURABOND
Project Name: DURA BOND STEEL
Sample Site: 140 S. ELLIS RD. - JAY
Sample Type: WATER

R E S U L T S

reported on the following page(s)

Approved By : NOT APPROVED, DRAFT ONLY

Table II-5 (continued)

AnalyticalTechnologies, Inc.

11 EAST OLIVE ROAD PENSACOLA FLORIDA 32514 PHONE (904) 474-1001

MINARY FINAL DRAFT

PRELIMINARY FINAL DRAFT

.ient:	GERAGHTY & MILLER	Lab I.D.#:	91-1265A-1
roject Number:	JF-DURABOND	Order Date:	02/26/91
roject Name:	DURA BOND STEEL	Sampled By:	R.F.M.
ample Site:	140 S. ELLIS RD. - JAX		
ample Type:	SOIL		

Sample ID.: SB-1A Sample Date: 02/21/91 Time: N/S

'8240 VOLATILE METHOD 8240

arameter	Units	Result	Detection Limit
ACETONE	PPB	BDL	119
ACROLEIN	PPB	BDL	1190
ACRYLONITRILE	PPB	BDL	1190
BENZENE	PPB	BDL	12
BROMODICHLOROMETHANE	PPB	BDL	12
BROMOFORM	PPB	BDL	24
BROMOMETHANE	PPB	BDL	12
2-BUTANONE (MEK)	PPB	BDL	36
CARBON DISULFIDE	PPB	BDL	12
CARBON TETRACHLORIDE	PPB	BDL	24
CHLOROBENZENE	PPB	BDL	12
CHLOROETHANE	PPB	BDL	12
2-CHLOROETHYL VINYL ETHER	PPB	BDL	60
CHLOROFORM	PPB	BDL	24
CHLOROMETHANE	PPB	BDL	24
CHLORODIBROMOMETHANE	PPB	BDL	60
DIBROMOMETHANE	PPB	BDL	60
DICHLORODIFLUOROMETHANE	PPB	BDL	60
1,1-DICHLOROETHANE	PPB	BDL	12
1,2-DICHLOROETHANE	PPB	BDL	24
1,1-DICHLOROETHENE	PPB	BDL	12
TOTAL 1,2-DICHLOROETHYLENE	PPB	BDL	60
1,2-DICHLOROPROPANE	PPB	BDL	24
CIS-1,3-DICHLOROPROPENE	PPB	BDL	12
TRANS-1,3-DICHLOROPROPENE	PPB	BDL	12
1,4-DICHLORO-2-BUTENE	PPB	BDL	60
ETHANOL	PPB	BDL	595
ETHYLBENZENE	PPB	BDL	12
ETHYL METHACRYLATE	PPB	BDL	60
2-HEXANONE	PPB	BDL	36
IODOMETHANE	PPB	BDL	60
METHYLENE CHLORIDE	PPB	BDL	36
4-METHYL-2-PENTANONE	PPB	BDL	36
STYRENE	PPB	BDL	24
1,1,2,2-TETRACHLOROETHANE	PPB	BDL	24

Sample ID.: SB-1A Test Parameters continued on next page

Table II-5 (continued)

AnalyticalTechnologies, Inc.
11 EAST OLIVE ROAD PHONE (904) 474-1001
PENSACOLA FLORIDA 32514

IMINARY FINAL DRAFT PRELIMINARY FINAL DRAFT

lient: GERAGHTY & MILLER

Lab I.D.#: 91-1265A-1
Order Date: 02/26/91
Sampled By: R.F.M.

Project Number: JF-DURABOND
Project Name: DURA BOND STEEL
Sample Site: 140 S. ELLIS RD. - JAX
Sample Type: SOIL

Sample ID.: SB-1A Sample Date: 02/21/91 Time: N/S

/8240 VOLATILE METHOD 8240 continued

Parameter	Units	Result	Detection Limit
TETRACHLOROETHENE	PPB	BDL	12
TOLUENE	PPB	BDL	60
1,1,1-TRICHLOROETHANE	PPB	BDL	60
1,1,2-TRICHLOROETHANE	PPB	BDL	24
TRICHLOROETHENE	PPB	BDL	12
TRICHLOROFLUOROMETHANE	PPB	BDL	12
2,3-TRICHLOROPROPANE	PPB	BDL	60
VINYL ACETATE	PPB	BDL	24
VINYL CHLORIDE	PPB	BDL	12
TOTAL XYLENES	PPB	BDL	48

AnalyticalTechnologies,Inc.
11 EAST OLIVE ROAD PHONE (904) 474-1001
PENSACOLA, FLORIDA 32514

II__RY FINAL DRAFT PRELIMINARY FINAL DRAFT

lent:	GERAGHTY & MILLER	Lab I.D.#:	91-1265A-2
oject Number:	JF-DURABOND	Order Date:	02/26/91
oject Name:	DURA BOND STEEL	Sampled By:	R.F.M.
mple Site:	140 S. ELLIS RD. - JAX		
mple Type:	SOIL		

Sample ID.: SB-1B Sample Date: 02/21/91 Time: N/S

3240 VOLATILE METHOD 8240

rameter	Units	Result	Detection Limit
CETONE	PPB	BDL	130
CROLEIN	PPB	BDL	1299
CRYLONITRILE	PPB	BDL	1299
BENZENE	PPB	BDL	13
BROMODICHLOROMETHANE	PPB	BDL	13
BROMOFORM	PPB	BDL	26
BROMOMETHANE	PPB	BDL	13
2- TANONE (MEK)	PPB	BDL	39
CARBON DISULFIDE	PPB	BDL	13
CARBON TETRACHLORIDE	PPB	BDL	26
CHLOROBENZENE	PPB	BDL	13
CHLOROETHANE	PPB	BDL	13
2-CHLOROETHYL VINYL ETHER	PPB	BDL	65
CHLOROFORM	PPB	BDL	26
CHLOROMETHANE	PPB	BDL	26
CHLORODIBROMOMETHANE	PPB	BDL	65
DIBROMOMETHANE	PPB	BDL	65
DICHLORODIFLUOROMETHANE	PPB	BDL	65
1,1-DICHLOROETHANE	PPB	BDL	13
1,2-DICHLOROETHANE	PPB	BDL	26
1,1-DICHLOROETHENE	PPB	BDL	13
TOTAL 1,2-DICHLOROETHYLENE	PPB	BDL	65
1,2-DICHLOROPROPANE	PPB	BDL	26
CIS-1,3-DICHLOROPROPENE	PPB	BDL	13
TRANS-1,3-DICHLOROPROPENE	PPB	BDL	13
1,4-DICHLORO-2-BUTENE	PPB	BDL	65
ETHANOL	PPB	BDL	649
ETHYLBENZENE	PPB	BDL	13
ETHYL METHACRYLATE	PPB	BDL	65
2-HEXANONE	PPB	BDL	39
IODOMETHANE	PPB	BDL	65
METHYLENE CHLORIDE	PPB	BDL	39
4-METHYL-2-PENTANONE	PPB	BDL	39
STYRENE	PPB	BDL	26
1,1,2,2-TETRACHLOROETHANE	PPB	BDL	26

Sample ID.: SB-1B Test Parameters continued on next page

Table II-5 (continued)

AnalyticalTechnologies, Inc.

11 EAST OLIVE ROAD PHONE (904) 474-1001
PENSACOLA FLORIDA 32514

IMINARY FINAL DRAFT

PRELIMINARY FINAL DRAFT

lient: GERAGHTY & MILLER

Lab I.D.#: 91-1265A-2
Order Date: 02/26/91
Sampled By: R.F.M.

roject Number: JF-DURABOND
roject Name: DURA BOND STEEL
ample Site: 140 S. ELLIS RD. - JAX
ample Type: SOIL

Sample ID.: SB-1B Sample Date: 02/21/91 Time: N/S

8240 VOLATILE METHOD 8240 continued

rameter	Units	Result	Detection Limit
ETRACHLOROETHENE	PPB	BDL	13
OLUENE	PPB	BDL	65
,1,1-TRICHLOROETHANE	PPB	BDL	65
,1,2-TRICHLOROETHANE	PPB	BDL	26
RICHLOROETHENE	PPB	BDL	13
RICHLOROFLUOROMETHANE	PPB	BDL	13
1 3-TRICHLOROPROPANE	PPB	BDL	65
VINYL ACETATE	PPB	BDL	26
VINYL CHLORIDE	PPB	BDL	13
TOTAL XYLENES	PPB	BDL	52

AnalyticalTechnologies, Inc.
11 EAST OLIVE ROAD   PHONE (904) 474-1001
PENSACOLA, FLORIDA 32514

ient: GERAGHTY & MILLER   Lab I.D.#: 91-1265A-3
Order Date: 02/26/91
oject Number: JF-DURABOND   Sampled By: R.F.M.
oject Name: DURA BOND STEEL
mple Site: 140 S. ELLIS RD. - JAX
mple Type: SOIL

Sample ID.: SB-2   Sample Date: 02/21/91   Time: N/S

8240   VOLATILE METHOD 8240

rameter	Units	Result	Detection Limit
CETONE	PPB	BDL	116
CROLEIN	PPB	BDL	1163
CRYLONITRILE	PPB	BDL	1163
BENZENE	PPB	BDL	12
BROMODICHLOROMETHANE	PPB	BDL	12
BROMOFORM	PPB	BDL	23
BROMOMETHANE	PPB	BDL	12
2-BUTANONE (MEK)	PPB	BDL	35
CARBON DISULFIDE	PPB	BDL	12
CARBON TETRACHLORIDE	PPB	BDL	23
CHLOROBENZENE	PPB	BDL	12
CHLOROETHANE	PPB	BDL	12
2-CHLOROETHYL VINYL ETHER	PPB	BDL	58
CHLOROFORM	PPB	BDL	23
CHLOROMETHANE	PPB	BDL	23
CHLORODIBROMOMETHANE	PPB	BDL	58
DIBROMOMETHANE	PPB	BDL	58
DICHLORODIFLUOROMETHANE	PPB	BDL	58
1,1-DICHLOROETHANE	PPB	BDL	12
1,2-DICHLOROETHANE	PPB	BDL	23
1,1-DICHLOROETHENE	PPB	BDL	12
TOTAL 1,2-DICHLOROETHYLENE	PPB	BDL	58
1,2-DICHLOROPROPANE	PPB	BDL	23
CIS-1,3-DICHLOROPROPENE	PPB	BDL	12
TRANS-1,3-DICHLOROPROPENE	PPB	BDL	12
1,4-DICHLORO-2-BUTENE	PPB	BDL	58
ETHANOL	PPB	BDL	581
ETHYLBENZENE	PPB	BDL	12
ETHYL METHACRYLATE	PPB	BDL	58
2-HEXANONE	PPB	BDL	35
IODOMETHANE	PPB	BDL	58
METHYLENE CHLORIDE	PPB	BDL	35
4-METHYL-2-PENTANONE	PPB	BDL	35
STYRENE	PPB	BDL	23
1,1,2,2-TETRACHLOROETHANE	PPB	BDL	23

Sample ID.: SB-2   Test Parameters continued on next page

Table II-5 (continued)

AnalyticalTechnologies, Inc.

11 EAST OLIVE ROAD (904) 474-1001
PENSACOLA, FLORIDA

ent: GERAGHTY & MILLER
oject Number: JF-DURABOND
oject Name: DURA BOND STEEL
mple Site: 140 S. ELLIS RD. - JAX
mple Type: SOIL

Lab I.D.#: 91-1265A-3
Order Date: 02/26/91
Sampled By: R.F.M.

Sample ID.: SB-2 Sample Date: 02/21/91 Time: N/S

8240 VOLATILE METHOD 8240 continued

rameter	Units	Result	Detection Limit
TETRACHLOROETHENE	PPB	BDL	12
TOLUENE	PPB	BDL	58
1,1,1-TRICHLOROETHANE	PPB	BDL	58
1,1,2-TRICHLOROETHANE	PPB	BDL	23
TRICHLOROETHENE	PPB	BDL	12
TRICHLOROFLUOROMETHANE	PPB	BDL	12
1,_,3-TRICHLOROPROPANE	PPB	BDL	58
VINYL ACETATE	PPB	BDL	23
VINYL CHLORIDE	PPB	BDL	12
TOTAL XYLENES	PPB	BDL	47

end of re

AnalyticalTechnologies, Inc.
11 EAST OLIVE ROAD PHONE (904) 474 100
PENSACOLA, FLORIDA 32514

I ARY FINAL DRAFT PRELIMINARY FINAL DRAFT

Client: GERAGHTY & MILLER
Project Number: JF-DURABOND
Project Name: DURA BOND STEEL
Sample Site: 140 S. ELLIS RD. - JAX
Sample Type: WATER

Lab I.D.#: 91-1265B-1
Order Date: 02/26/91
Sampled By: R.F.M.

Sample ID.: PZ-1 Sample Date: 02/21/91 Time: N/S

/8240 VOLATILE METHOD 8240

Parameter	Units	Result	Detection Limit
ACETONE	PPB	BDL	10
ACROLEIN	PPB	BDL	100
ACRYLONITRILE	PPB	BDL	100
BENZENE	PPB	BDL	1
BROMODICHLOROMETHANE	PPB	BDL	1
BROMOFORM	PPB	BDL	2
BROMOMETHANE	PPB	BDL	1
BUTANONE (MEK)	PPB	BDL	3
CARBON DISULFIDE	PPB	BDL	
CARBON TETRACHLORIDE	PPB	BDL	
CHLOROBENZENE	PPB	BDL	1
CHLOROETHANE	PPB	BDL	1
2-CHLOROETHYL VINYL ETHER	PPB	BDL	5
CHLOROFORM	PPB	BDL	2
CHLOROMETHANE	PPB	BDL	2
CHLORODIBROMOMETHANE	PPB	BDL	5
DIBROMOMETHANE	PPB	BDL	5
DICHLORODIFLUOROMETHANE	PPB	BDL	5
1,1-DICHLOROETHANE	PPB	BDL	1
1,2-DICHLOROETHANE	PPB	BDL	2
1,1-DICHLOROETHENE	PPB	BDL	1
TOTAL 1,2-DICHLOROETHYLENE	PPB	BDL	5
1,2-DICHLOROPROPANE	PPB	BDL	2
CIS-1,3-DICHLOROPROPENE	PPB	BDL	1
TRANS-1,3-DICHLOROPROPENE	PPB	BDL	1
1,4-DICHLORO-2-BUTENE	PPB	BDL	5
ETHANOL	PPB	BDL	50
ETHYLBENZENE	PPB	BDL	1
ETHYL METHACRYLATE	PPB	BDL	5
2-HEXANONE	PPB	BDL	3
IODOMETHANE	PPB	BDL	5
METHYLENE CHLORIDE	PPB	BDL	3
4-METHYL-2-PENTANONE	PPB	BDL	3
STYRENE	PPB	BDL	2
1,1,2,2-TETRACHLOROETHANE	PPB	BDL	2

Sample ID.: PZ-1 Test Parameters continued on next page

Analytical Technologies, Inc.
11 EAST OLIVE ROAD PHONE (904) 474-1001
PENSACOLA, FLORIDA 32514

ient: GERAGHTY & MILLER

oject Number: JF-DURABOND
oject Name: DURA BOND STEEL
mple Site: 140 S. ELLIS RD. - JAX
mple Type: WATER

Lab I.D.#: 91-1265B-1
Order Date: 02/26/91
Sampled By: R.F.M.

Sample ID.: PZ-1 Sample Date: 02/21/91 Time: N/S

8240 VOLATILE METHOD 8240 continued

rameter	Units	Result	Detection Limit
TETRACHLOROETHENE	PPB	BDL	1
TOLUENE	PPB	BDL	5
1,1,1-TRICHLOROETHANE	PPB	BDL	5
1,1,2-TRICHLOROETHANE	PPB	BDL	2
TRICHLOROETHENE	PPB	BDL	1
TRICHLOROFLUOROMETHANE	PPB	BDL	1
1 ,3-TRICHLOROPROPANE	PPB	BDL	5
V YL ACETATE	PPB	BDL	2
VINYL CHLORIDE	PPB	BDL	1
TOTAL XYLENES	PPB	BDL	4

AnalyticalTechnologies,Inc.
11 EAST OLIVE ROAD PHONE (904) 474-1001
PENSACOLA FLORIDA 32514

MINARY FINAL DRAFT PRELIMINARY FINAL DRAFT

lient: GERAGHTY & MILLER
roject Number: JF-DURABOND
roject Name: DURA BOND STEEL
ample Site: 140 S. ELLIS RD. - JAX
ample Type: WATER

Lab I.D.#: 91-1265B-2
Order Date: 02/26/91
Sampled By: R.F.M.

Sample ID.: RINSATE 1 Sample Date: 02/21/91 Time: N/S

/8240 VOLATILE METHOD 8240

arameter	Units	Result	Detection Limit
ACETONE	PPB	BDL	10
ACROLEIN	PPB	BDL	100
ACRYLONITRILE	PPB	BDL	100
BENZENE	PPB	BDL	1
BROMODICHLOROMETHANE	PPB	BDL	1
BROMOFORM	PPB	BDL	2
BROMOMETHANE	PPB	BDL	1
2-BUTANONE (MEK)	PPB	BDL	3
CARBON DISULFIDE	PPB	BDL	1
CARBON TETRACHLORIDE	PPB	BDL	2
CHLOROBENZENE	PPB	BDL	1
CHLOROETHANE	PPB	BDL	1
2-CHLOROETHYL VINYL ETHER	PPB	BDL	5
CHLOROFORM	PPB	BDL	2
CHLOROMETHANE	PPB	BDL	2
CHLORODIBROMOMETHANE	PPB	BDL	5
DIBROMOMETHANE	PPB	BDL	5
DICHLORODIFLUOROMETHANE	PPB	BDL	5
1,1-DICHLOROETHANE	PPB	BDL	1
1,2-DICHLOROETHANE	PPB	BDL	2
1,1-DICHLOROETHENE	PPB	BDL	1
TOTAL 1,2-DICHLOROETHYLENE	PPB	BDL	5
1,2-DICHLOROPROPANE	PPB	BDL	2
CIS-1,3-DICHLOROPROPENE	PPB	BDL	1
TRANS-1,3-DICHLOROPROPENE	PPB	BDL	1
1,4-DICHLORO-2-BUTENE	PPB	BDL	5
ETHANOL	PPB	BDL	50
ETHYLBENZENE	PPB	BDL	1
ETHYL METHACRYLATE	PPB	BDL	5
2-HEXANONE	PPB	BDL	3
IODOMETHANE	PPB	BDL	5
METHYLENE CHLORIDE	PPB	BDL	3
4-METHYL-2-PENTANONE	PPB	BDL	3
STYRENE	PPB	BDL	2
1,1,2,2-TETRACHLOROETHANE	PPB	BDL	2

Sample ID.: RINSATE 1 Test Parameters continued on next page

AnalyticalTechnologies,Inc.
11 EAST OLIVE ROAD PHONE (904) 474-1001
PENSACOLA, FLORIDA 32514

R IMINARY FINAL DRAFT PRELIMINARY FINAL DRA

Client: GERAGHTY & MILLER
Lab I.D.#: 91-1265B-2
Order Date: 02/26/91
Sampled By: R.F.M.

Project Number: JF-DURABOND
Project Name: DURA BOND STEEL
Sample Site: 140 S. ELLIS RD. - JAX
Sample Type: WATER

Sample ID.: RINSATE 1 Sample Date: 02/21/91 Time S

OL/8240 VOLATILE METHOD 8240 continued

Parameter	Units	Result	Detection Limit
TETRACHLOROETHENE	PPB	BDL	1
TOLUENE	PPB	BDL	5
1,1,1-TRICHLOROETHANE	PPB	BDL	5
1,1,2-TRICHLOROETHANE	PPB	BDL	2
TRICHLOROETHENE	PPB	BDL	1
TRICHLOROFLUORO ME	PPB	BDL	1
1,2,3-TRICHL	PPB	BDL	5
INYL ACETATE	PPB	BDL	2
INYL CHLORIDE	PPB	BDL	1
TOTAL XYLENES	PPB	BDL	4

end of repor

Table II-6

Analysis of Drummed Waste
June 27, 1991 (Reference 99)

PARAMETER	WASTE DRUM SAMPLE*
VOLATILE ORGANIC COMPOUNDS (8240)**	
2-Butanone, mg/L	360000
Toluene, mg/L	14000
Ethylbenzene, mg/L	6600
Xylenes, mg/L	29000
Arsenic, mg/L	<0.080
Barium, mg/L	33
Cadmium, mg/L	0.18
Chromium, mg/L	58
Lead, mg/L	16
Mercury, mg/L	<0.0080
Selenium, mg/L	<0.16
Silver, mg/L	<0.080

* High waste drum sample results are due to dilution of the sample prior to analyses by laboratory.

** All Volatile Organic Compounds (EPA Method 8240) not presented on the table were measured below laboratory detection limits.

mg/L milligrams per liter.

216.1040

Soil samples were collected in two places in the Area Adjacent to West Side of Main Facility Building (SWMU 1) in June 1991. Figure II-6 shows all initial locations for soil borings, ground-water monitoring wells, and background sampling points. SS-2 was taken from the north end of the area and SS-3 from the south end of the area. All VOCs were below detection limits at both borings. For metals, arsenic, chromium, and lead were detected in concentrations of 17 mg/kg, 2.9 mg/kg, and 3.3 mg/kg, respectively, at SS-2, and 34 mg/kg, 16 mg/kg and 82 mg/kg, respectively, at SS-3. Mercury was detected at 0.059 mg/kg at SS-3. Background concentrations determined in July 1991 in the far northwest corner of the facility indicated 18 mg/kg, 6.0 mg/kg, and 26 mg/kg for arsenic, chromium, and lead, respectively. Background levels for mercury were not analyzed (Reference 92).

Soil samples were collected in the Area Immediately Adjacent to the Dumpster (SWMU 2) in June 1991. SS-1 was taken from the northern end of the area. All VOCs were below detection limits at both borings. For metals, arsenic, chromium, lead, and mercury were detected in concentrations of 15 mg/kg, 2.1 mg/kg, 6.4 mg/kg, and 0.017 mg/kg, respectively. Background concentrations determined in July 1991 in the far northwest corner of the facility indicated 18 mg/kg, 6.0 mg/kg, and 26 mg/kg, for arsenic, chromium, and lead, respectively. Results from the June 1991 soil sampling are shown in Table II-7 (Reference 92).

Sampling was performed by Missimer & Associates at two hydraulically downgradient wells on June 25, 1991. MW-2 is located near the western edge of the main facility building and MW-3 is located near the eastern edge of the building. The samples were analyzed for VOCs using EPA Method 8240, as well as the 8 RCRA metals. Barium (0.11 mg/l) was detected in the sample from MW-2. Arsenic 0.029 mg/l, chromium 0.14 mg/l, and lead 0.72 mg/l were detected in the sample from MW-3. The lead concentration exceeded the State of Florida Primary Drinking Water Standards MCLs for lead (0.05 mg/l). A sample taken on July 8, 1991 at MW-3 revealed arsenic 0.016 mg/l and lead 0.045 mg/l in the water. Filtered samples on June 25, 1991 at MW-2 indicated 0.11 mg/l barium. Filtered samples at MW-3 on June 25, 1991 indicated 0.76 mg/l barium and 0.012 mg/l lead. Table II-8 shows the results of this initial ground-water analysis (Reference 92).

Further ground-water samples were taken immediately south of the Area Adjacent to the West Side of the Main Facility Building (SWMU 1) at MW-4 and in two locations adjacent to SWMU 1 within the main building at MW-5 and MW-6. Figure II-7 includes the locations for all additional ground-water monitoring wells. These samples were taken on May 12, 1992. The results for all VOCs were below detection limits. Except for barium, the results

Figure II-6

Map Showing Location of Sampling for Four Underground and Aboveground Storage Tanks

(Reference 99)

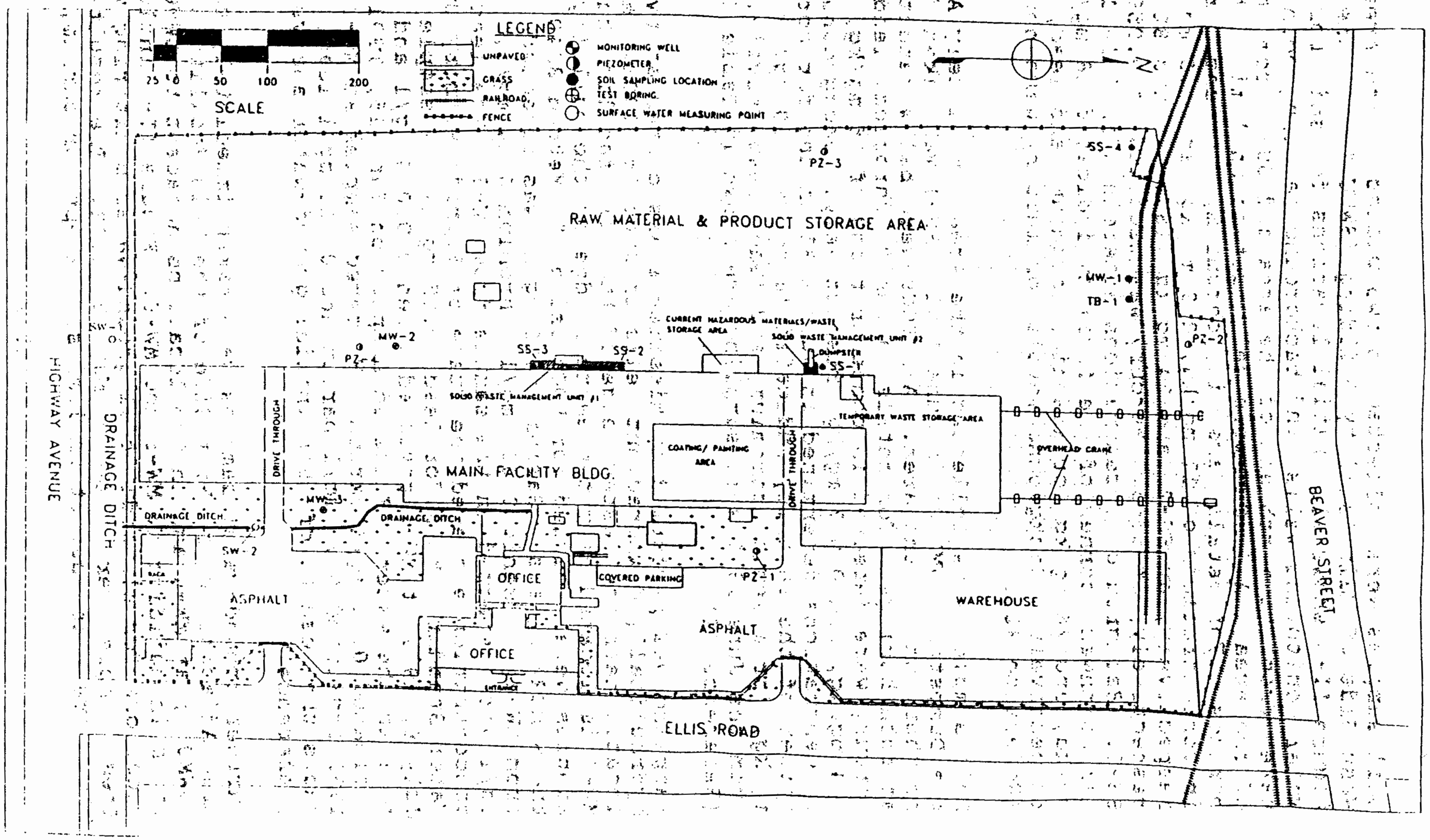


Table II-7

Analysis of Soil Samples
June 25, 1991 and July 8, 1991
(Reference 92)

PARAMETER	SS-1	SS-2	SS-3	SS-4*
Arsenic, mg/kg dw	15	17	34	18
Barium, mg/kg dw	<0.010	<0.010	<0.010	NA
Cadmium, mg/kg dw	<0.39	<0.33	<0.28	N
Chromium, mg/kg dw	2.1	2.9	16	6.0
Lead, mg/kg dw	6.4	3.3	82	26
Mercury, mg/kg dw	0.017	<0.012	0.059	NA
Selenium, mg/kg dw	<0.77	<0.66	<0.56	NA
Silver, mg/kg dw	<0.010	<0.010	<0.010	NA
Percent solids, %	83%	84%	83%	84%

All Volatile Organic Compounds (EPA Method 8240) were measured below laboratory detection limits for soil samples SS-1, SS-2, and SS-3.

* SS-4 was collected on July 8, 1991 as a background sample.

mg/kg dw milligrams per kilogram, dry weight.

NA Not Analyzed

216.1040

Table II-8

Analysis of Ground Water samples
June 25, 1991 and July 8, 1991
(Reference 92)

PARAMETER	MW-1	MW-2	MW-3	MW-3*
Arsenic, mg/L	<0.010	<0.010	0.029	0.016
Barium, mg/L	0.052	0.11	<0.010	NA
Cadmium, mg/L	<0.0050	<0.0050	<0.0050	NA
Chromium, mg/L	<0.010	<0.010	0.14	<0.010
Lead, mg/L	<0.0050	<0.0050	0.72	0.045
Mercury, mg/L	<0.00020	<0.00020	0.00023	NA
Selenium, mg/L	<0.010	<0.010	<0.010	NA
Silver, mg/L	<0.010	<0.010	<0.010	NA
Turbidity, NTU	8.7	14	420	8.8
** Arsenic, mg/L	<0.010	<0.010	<0.010	NA
** Barium, mg/L	0.048	0.11	0.076	NA
** Cadmium, mg/L	<0.010	<0.010	<0.010	NA
** Chromium, mg/L	<0.010	<0.010	<0.010	NA
** Lead, mg/L	<0.0050	<0.0050	0.012	NA
** Mercury, mg/L	<0.00020	<0.00020	<0.00020	NA
** Selenium, mg/L	<0.010	<0.010	<0.010	NA
** Silver, mg/L	<0.010	<0.010	<0.010	NA

All Volatile Organic Compounds (EPA Method 8240) were measured below laboratory detection limits for all wells sampled.

* - MW-3 was resampled July 8, 1991.

** - Filtered.

NA- Not analyzed.

mg/L - milligrams per liter.

NTU - Nephelo Metric Turbidity Unit

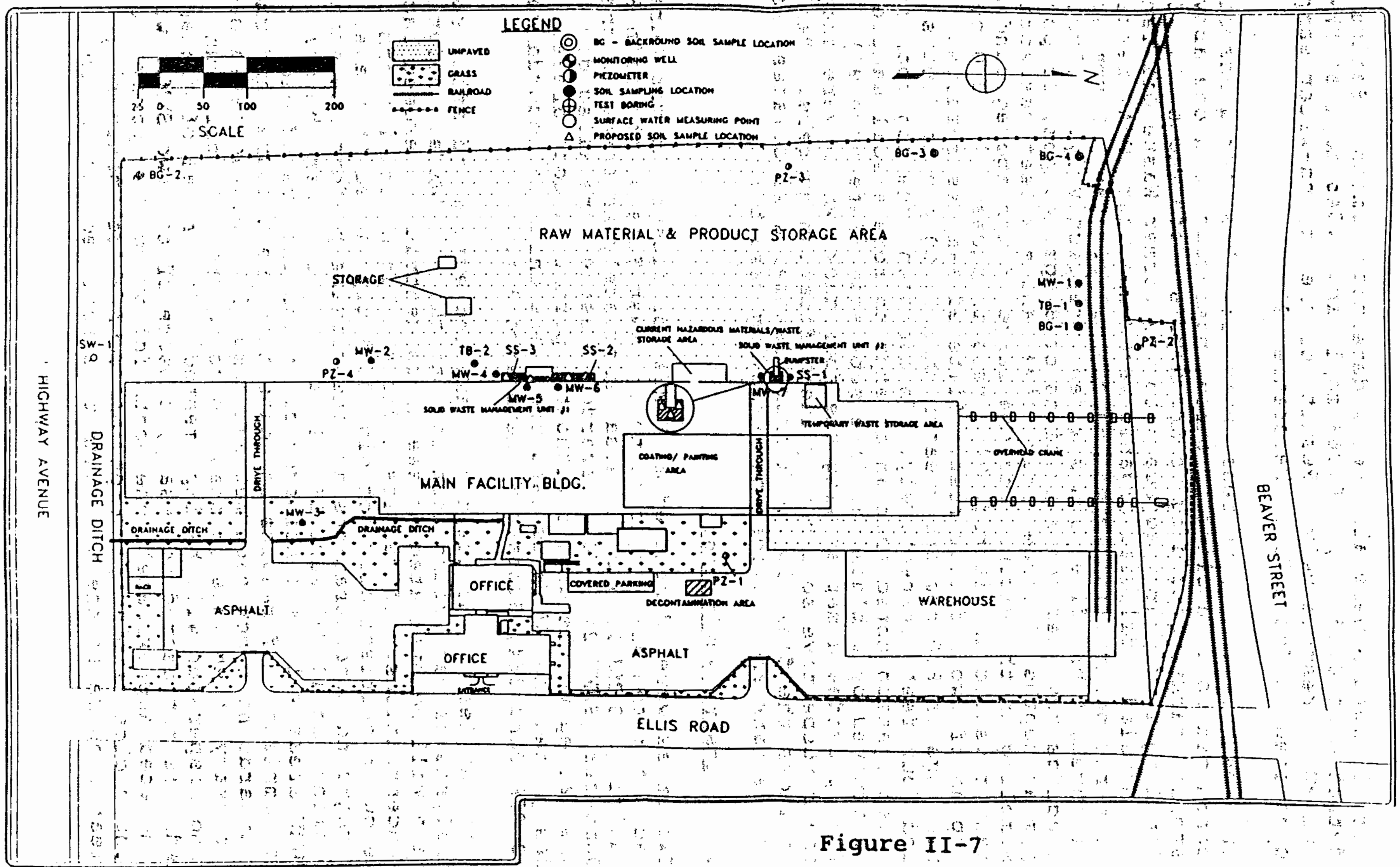


Figure II-7

Locations of All Ground-Water Monitoring Wells
(Reference 92)

for all metals were also below detection limits. Barium was detected at 0.059 mg/l, 0.068 mg/l, and 0.045 mg/l at MW-4, MW-5, and MW-6, respectively. Results of the ground-water sampling are contained in Table II-9 (Reference 92).

On June 21, 1992, a representative from Missimer & Associates conducted soil sampling of three underground and one aboveground storage tanks, according to Mr. Norris (References 99, 104). Sampling in the area adjacent to the former Waste Oil Tank (SWMU 6) revealed unfiltered organic vapor analyzer (OVA) readings of 10 parts per million (ppm), 50 ppm, 33 ppm, and 43 ppm at depths of three, four, five, and six feet, respectively. Filtered OVA readings revealed concentrations of 6 ppm, 45 ppm, 22 ppm, and 15 ppm at depths of three, four, five, and six feet respectively. Sampling in the vicinity of the large 15-ton aboveground storage tank revealed unfiltered OVA levels in excess of 1,000 ppm at depths of two and four feet. Filtered samples resulted in readings of 810 ppm and greater than 1,000 ppm at depths of two and four feet, respectively. In addition, the log book from the investigation noted that an attempt to bore a soil sample was obstructed by a black tar-like substance (Reference 99). Figure II-8 provides a map showing the four tanks which were sampled and their respective soil boring identification numbers. Table II-10 includes the field log book from Missimer & Associates' sampling of the tank and provides the sampling results.

3. Closure Activities

Two areas were identified as SWMUs for closure at the Dura-Bond facility: the Area Adjacent to the West Side of the Main Facility Building (SWMU 1) and the Area Immediately Adjacent to the Dumpster (SWMU 2). F005 hazardous wastes were allegedly discharged to the ground without a permit at both areas. FDER designated the SWMUs as land treatment units in accordance with 40 CFR Part 264, Subpart M (Reference 92).

After at least four quarterly sampling events and after soil analysis of background locations at the two SWMUs, analytical data will be evaluated to see if concentrations exceed background concentrations. If results indicate that concentrations are below or statistically not significantly higher than average background concentrations and the closure performance standard outlined in 40 CFR Part 264.111(a) and (b), then the soil in the SWMU areas will be considered clean and closure of each unit will be complete. If results indicate that the closure performance standards have not been met and removal of contaminated media is necessary, then interim measures to control run-off, run-on, and wind dispersion will be implemented. If removal of contaminated media is not deemed necessary, closure of the two SWMUs will be completed approximately one month following the approval of Dura-Bond's closure plans, except for ground-water monitoring. If clean closure at the site cannot be achieved through the

Table II-9

Results of Further Ground-Water Sampling

& ENVIRONMENTAL SERVICES, INC.

2846 Industrial Plaza Drive (32301) • P.O. Box 13056 • Tallahassee, FL 32317-3056 • (904) 878-3994 • Fax (904) 878-9504

Table II-9

Results of Further Ground Water Sampling
(Reference 99)

LOG NO: T2-01037
Revised 06.03.92
Received: 13 MAY 92

Mr. James P. Oliveros
Missimer & Associates, Inc.
8130 Bay Meadows Way, West, Suite 104
Jacksonville, FL 32256

Purchase Order: 591-553

Project: Durabond/JE1-591
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
01037-1	MW-1	05-12-92
01037-2	SW-1	05-12-92
01037-3	MW-4	05-12-92
01037-4	MW-5	05-12-92
01037-5	MW-6	05-12-92

PARAMETER	01037-1	01037-2	01037-3	01037-4	01037-5
Volatile Organic Compounds (8240)					
Chloromethane, ug/l	<10	<10	<10	<10	<10
Bromomethane, ug/l	<10	<10	<10	<10	<10
Vinyl Chloride, ug/l	<10	<10	<10	<10	<10
Chloroethane, ug/l	<10	<10	<10	<10	<10
Methylene chloride, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Acetone, ug/l	<50	<50	<50	<50	<50
Carbon disulfide, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethylene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
cis/trans-1,2-Dichloroethylene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
2-Butanone, ug/l	<50	<50	<50	<50	<50
1,1,1-Trichloroethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl acetate, ug/l	<10	<10	<10	<10	<10
Bromodichloromethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0

SAVANNAH LABORATORIES
& ENVIRONMENTAL SERVICES, INC.
2846 Industrial Plaza Drive (32301) • P.O. Box 13056 • Tallahassee, FL 32317-3056 • (904) 878-3994 • Fax (904) 878-9504

Table II-9 (continued)

LOG NO: T2-01037
Revised 06.03.92
Received: 13 MAY 92

Mr. James P. Oliveros
Missimer & Associates, Inc.
8130 Bay Meadows Way, West, Suite 104
Jacksonville, FL 32256

Purchase Order: 591-553

Project: Durabond/JE1-591
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
01037-1	MW-1	05-12-92
01037-2	SW-1	05-12-92
01037-3	MW-4	05-12-92
01037-4	MW-5	05-12-92
01037-5	MW-6	05-12-92

PARAMETER	01037-1	01037-2	01037-3	01037-4	01037-5
1,2-Dichloropropane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethylene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Dibromochloromethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Benzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
2-Chloroethylvinyl ether, ug/l	<50	<50	<50	<50	<50
Bromoform, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
2-Hexanone, ug/l	<50	<50	<50	<50	<50
4-Methyl-2-pentanone, ug/l	<50	<50	<50	<50	<50
Tetrachloroethylene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Styrene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Xylenes, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Turbidity, NTU	21	41	12	52	63
Arsenic, mg/l	<0.010	<0.010	<0.010	<0.010	<0.010
Barium, mg/l	0.065	0.065	0.059	0.068	0.045
Cadmium, mg/l	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chromium, mg/l	<0.010	<0.010	<0.010	<0.010	<0.010

LOG NO: T2-01037
Revised 06.03.92
Received: 13 MAY 92

Table II-9 (continued)

Mr. James P. Oliveros
Missimer & Associates, Inc.
8130 Bay Meadows Way, West, Suite 104
Jacksonville, FL 32256

Purchase Order: 591-553

Project: Durabond/JE1-591
Sampled By: Client

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE SAMPLED
01037-1	MW-1	05-12-92
01037-2	SW-1	05-12-92
01037-3	MW-4	05-12-92
01037-4	MW-5	05-12-92
01037-5	MW-6	05-12-92

PARAMETER	01037-1	01037-2	01037-3	01037-4	01037-5
Lead, mg/l	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury, mg/l	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Selenium, mg/l	<0.010	<0.010	<0.010	<0.010	<0.010
Silver, mg/l	<0.010	<0.010	<0.010	<0.010	<0.010

Figure II-8

Map Showing Location of Four Tanks Sampled and Their Respective Soil Boring Numbers (Reference 99)

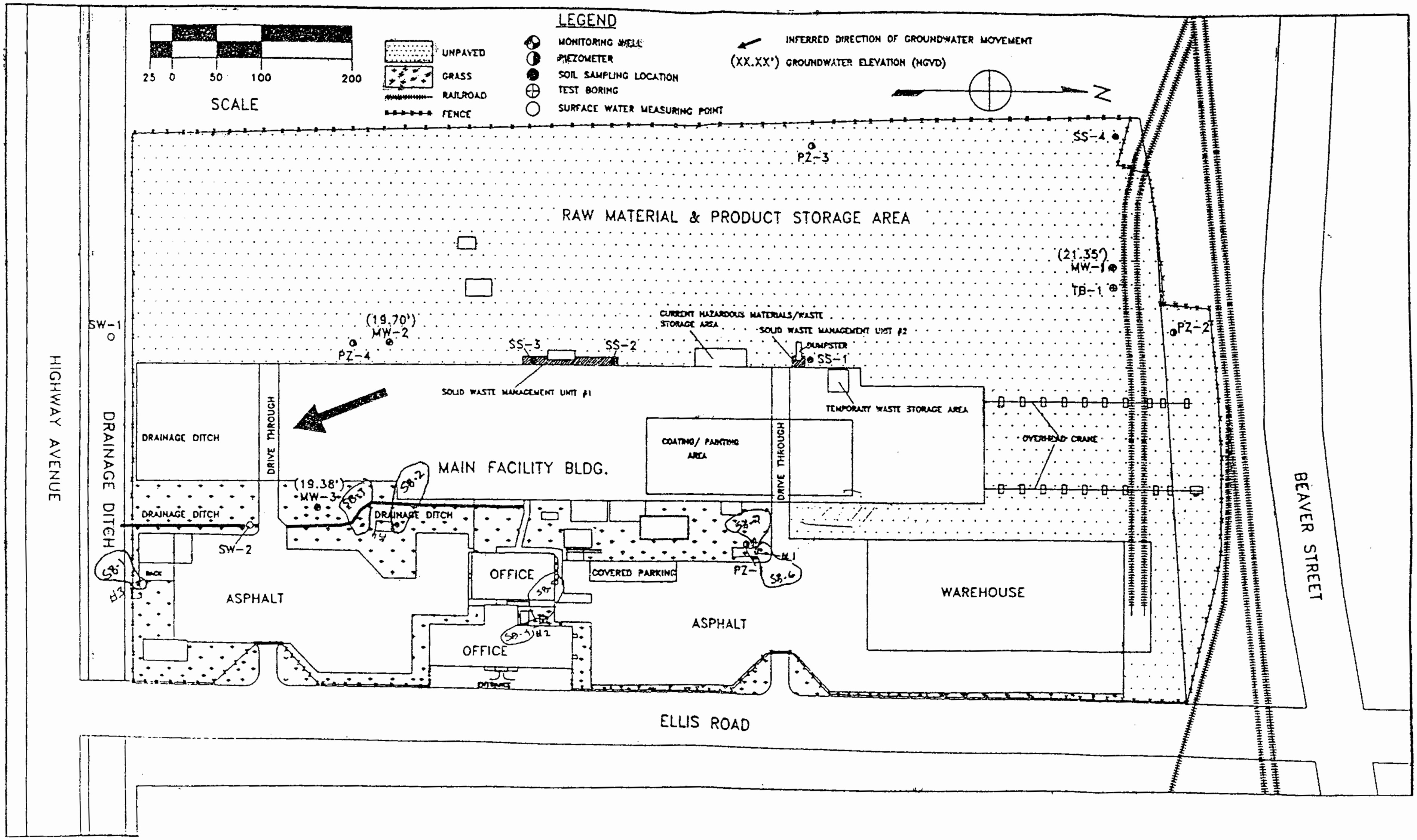


Table II-10

Field Log Book Including OVA Analysis
of Soil Surrounding the Four Underground
and Aboveground Storage Tanks

Table II-10
Field Log Book Including OVA Analysis of
Soil Surrounding the Four Underground and Aboveground
Storage Tanks (Reference 99)

6/23/92 DURABOND JEI-560

0800 DEPARTED M&A FOR DURABOND.
CALIBRATION CHECKED ON OVA-FID
128. PRIOR TO DEPARTURE.
0820 ARRIVED DURABOND.
BEGAN SOIL BORINGS FOR TANK LOCATION
#3
0835 EQUIPMENT. HAND AUGER AND
MASON JARS DECON'D WITH
LIQUINOX AND DISTILLED WATER
SOLUTION. BEGAN SOIL BORINGS.
0922 COMPLETED SB-1 TO 6 FEET.
SOIL FROM SURFACE TO 4.5' IS
GREY AND BROWN SANDY CLAY WITH RED
STREAKS. FROM 4.5' TO 6' CLAYEY
SAND FINE PARTICLES. AROUND 6'
SOIL IS DAMP BUT NOT SATURATED.
0940 SOIL FROM SB-1 MOSTLY UPPER
LAYERS HAVE ORGANIC ODOR. 5' + 6'
LAYER HAS SLIGHT ODOR OTHER THAN
NATURAL ODOR BUT NOT HYD. CARB. ODOR.
BEGAN DECONING EQUIP.
0957 BEGAN SB-2. IN AREA OF TANK #4.
~~0944~~ 1045 EQUIP DECON'D BEGAN SB-3 IN AREA
OF TANK #4. LAURA ARRIVED ON SITE
1025.

6/21/92 DURABOND JEI-560

SAMPLE	DEPTH	TIME	AMBIENT	w/o FILTER	FILTER	TOTAL
SB-1	1'	0850 0928	1/–	1	—	0
SB-1	2'	0857 0929	1/–	2	–	1
SB-1	3'	0903 0930	0/0	10	6	4
SB-1	4'	0907 0931	0/0	50	45	5
SB-1	5'	0914 0931	0/0	33	22	11
SB-1	6'	0919 0932	0/0	43	15	28
SB-2	2'	1005 1040	0/–	0	—	0
SB-2	4'	1012 1041	0/–	0	—	0
SB-4	2'	1135 1215	0/B	>1000	810	>190
SB-4	4'	1143 1217	3/0	>1000	>1000	~~>1000~~ UU
SB-5	2'	1140 1221	0/0	60	96	-36
SB-6	2.5'	1205 1223	0/0	0	0	0
SB-7	2'	1207 1224	0/0	20	10	10
SB-7	4'	1235 1300	0/0	28	18	10

6/23/92 DURABOND JEI-560

1106 SB-3 NO SAMPLE. ABOVEGROUND TANK #4 HAS CONCRETE ON 2 SIDES AND DAMP SOIL FROM DRAINAGE DITCH ON SIDE NEAREST WAREHOUSE. NORTH SIDE OF TANK AREA #4 IS WHERE SB-2 WAS TAKEN. SOUTH OF TANK AREA #4 IS A CONCRETE PAD WITH A SQUARE HOLE OUT OF WHICH ~~ARE~~ IS PIPING THAT MAY BE ASSOCIATED WITH THE FORMER TANK. A BORING WAS ATTEMPTED INSIDE THE HOLE BUT THE BORING WAS OBSTRUCTED. THE TOP SOIL IS DAMP AND HAS HYD. CARB. ODOR. SEVERAL FEET SOUTH OF THE TANK AREA #4 THERE IS A GAP IN THE CONCRETE, SB-3 WAS ATTEMPTED AT THIS LOCATION. HERE THE HOLE WAS OBSTRUCTED BY A BLACK TAR LIKE SUBSTANCE. AT THIS POINT ATTEMPTS AT SB-3 IN THE AREA OF TANK #4 WERE STOPPED.

1112 AREA (DECON) PICKED UP AND PREPARATION FOR DEPARTURE TO NORTH SIDE OF PROPERTY BEGAN.

1120 PREPARED FOR SB-4 AND SB-5 ON TANK AREA #2.

6/23/92 DURABOND JEI-560

1152 SB-4 AND SB-5 COMPLETE. SOIL AT SURFACE NEAR SATURATION. SB-5 SATURATED AT 2'. SB-4 VERY STRONG HYD. CARB. ODOR. SB-4 SATURATED AT 3'.

1155 BEGAN SB-6 AND SB-7 IN TANK AREA #1.

1210 SB-6 SOIL SATURATED AT 2.5'
SB-6 COMPLETE
SB-7 ONE SAMPLE TAKEN AT 2'

1225 FILTER CARBON CHANGED AT SB-5

1240 SAMPLE TAKEN OF METAL DUST. WHILE IN AREA FOR SAMPLE COLLECTION SOME KIND OF BLOWER CAME ON AND BLEW DUST OUT OF SHAFT. SAMPLE WAS GRABBED FROM TOP OF PILE.

1315 SAMPLING COMPLETE DEPARTED SITE.

1400 ARRIVED M&A

implementation of the closure plan which Dura-Bond outlined in its Closure Permit Application, a "risk-based" clean closure plan will be developed and implemented with FDER's approval. However, contingency closure plans will be implemented if "risk-based" clean closure cannot be achieved. Post-closure actions will be determined based on any contingent post-closure measures that are implemented (Reference 92).

4. Air and NPDES Permits

On July 29, 1991, the Department of Health, Welfare & Bio-Environmental Services in Jacksonville issued Dura-Bond a Cease and Desist Citation in response to the January 1991 site inspection. The citation stated that Dura-Bond violated Florida Administrative Code (FAC) Chapter 17-2 and Jacksonville Environmental Protection Board (JEPB) Rule 2 for operating the Wheelabrator® machine, and its coating and open air sandblasting processes without valid FDER Air Pollution Source Construction or Operation Permits. Jacksonville's Air Quality Division (AQD) had determined that Dura-Bond had exceeded the Reasonably Available Control Technology (RACT) emission limiting standards for VOCs when coatings that contained greater than 3.5 pounds per gallon of VOCs were used in the coating process for tanks. In addition Dura-Bond had failed to obtain an appropriate permit from FDER before constructing, modifying, or operating these process units (Reference 53). In response to this citation, Dura-Bond instructed its employees not to order any paint with VOCs in excess of 3.5 pounds per gallon (References 54 and 69).

Dura-Bond submitted an application to FDER for an operating permit for its sandblasting and coating/painting processes on July 31, 1991 (Reference 56). Dura-Bond submitted an Air Pollution Source Construction Permit application to the Jacksonville Department of Health, Welfare & Bio-Environmental Services on August 5, 1991 (Reference 59).

On August 23, 1991 Jacksonville's Air Resources Division (ARD) notified Dura-Bond that it would draft a Consent Order for settlement of the citation enforcement case (Reference 60) FDER published its intent to issue an air construction permit for the Dura-Bond facility on October 9, 1991 (Reference 67). Because of AQD's determination that Dura-Bond had exceeded RACT emission standards for VOCs in its coating operations, the AQD proposal for the settlement of the violations for emitting airborne pollutants without a permit and exceeding RACT standards was incorporated into the Consent Order (Reference 69). Dura-Bond was notified of the Department of Environmental Regulation's intent to issue an air construction permit (AC16-200544) for the existing spray painting and blasting operations at its facility on October 7, 1991 (Reference 67).

The Consent Order was entered into between Dura-Bond and the City of Jacksonville on November 12, 1991, and the Environmental Protection Board of Jacksonville adopted this agreement on the same day (Reference 75). In this document, Dura-Bond agreed to not use coating materials which exceeded 3.5 pounds of VOCs per gallon (minus water) (Reference 74). The permit (AC16-20054) for Dura-Bond to construct air emission controls for its shot blasting and spray painting areas was issued on November 27, 1991 and expired on February 29, 1992 (Reference 78).

A Certificate of Completion of Construction was issued by FDER on January 24, 1992 for the operations previously approved (Reference 82).

Permit AO16-207948 for Dura-Bond's spray painting and blasting operations was issued by FDER on April 17, 1992 (to expire on arch 31, 1997). This permit outlined standards, test methods, and schedules for Visible Emissions (VE) and VOCs (Reference 91).

5. Underground Storage Tanks

A City of Jacksonville inspection of the Dura-Bond facility on July 24, 1989 noted several violations of underground storage tank regulations. The four Underground and Aboveground Storage Tanks (AOC B) were cited as being abandoned without any notification to FDER. Dura-Bond had also failed to maintain a current registration placard, invoices, inventory records, and maintenance exam records for the tanks. In addition, the excavation area had not been backfilled and there was no monitoring system in place for those areas. During a tank inspection by the City of Jacksonville on April 10, 1990, a representative of Dura-Bond produced a storage tank notification form and an invoice for the removal of the underground storage tanks (Reference 13). A map showing the locations of four of the storage tanks is provided in Figure II-8 on page II-33.

F. Environmental and Demographic Setting

1. Meteorology

The climate of Duval County is characterized by long, warm, humid summers and mild winters. Temperatures range from an average low of 54.6°F in January to an average high of 81°F in July and August. The average annual temperature is 68.4°F (Reference 1).

The wettest months occur during the summer (June through October). On average, approximately 65 percent of the annual total rainfall occurs during these months, with a monthly average rainfall of 6.78 inches. The remaining 35 percent of the yearly precipitation is evenly distributed throughout the year. The driest months occur in the fall (November and December), with a monthly rainfall average of 2.19 inches. The average annual precipitation is 54.47 inches (Reference 1).

Wind flow patterns in the area are controlled by seasonal changes. Northeasterly winds prevail during the fall and winter months, whereas the spring and summer months are characterized by southwesterly winds (References 92, 1).

The property is located within an area which has been designated as not meeting ambient air quality standards for ozone. It is, however, located within an area designated as an air quality maintenance area for pollutant particulate matter (Reference 74).

2. Floodplain, Surface Waters, and Drainage

The area surrounding the Dura-Bond facility is characterized by little topographic variation. Elevations on the plant property range from approximately 20 feet above mean sea level to approximately 25 feet above mean sea level (Reference 92).

A small area along the western boundary of the Dura-Bond property lies within the 100-year floodplain area. However, all of the SWMUs and most of the industrial features and operations at the site are located outside of the 100-year floodplain limit (Reference 92). A map showing the 100-year floodplain contours is provided in Figure II-9.

Surface water runoff within the property boundaries flows to the west-southwest. A Drainage Ditch (SWMU 19) runs from the northern end of the property - beginning between the main facility building and the north warehouse - to the southern site boundary and discharges through culverts into the Highway Avenue drainage ditch. Runoff from both sides of the ditch is received by the drainage ditch. The Highway Avenue drainage ditch runs from east to west along the southern site boundary, on the north side of Highway Avenue (Reference 92). It eventually discharges to the Cedar River. The Cedar River flows in a southerly direction and joins the Ortega River which empties into the St. Johns River.

Due to the presence of a seepage face along the northern edge of the Highway Avenue drainage ditch, shallow ground water beneath the facility discharges to the ditch, according to Dura-Bond's Closure Permit Application (Reference 92). Given the proximity of the Paint Cans Excavation Area (SWMU 12) to the northern edge of the ditch, there is a high likelihood that contamination from the paint cans may have entered the ditch.

Surface runoff on either side of the main facility building also discharges to the Storm Water System (SWMU 18). One storm water grate is located in the southwest corner of the property near the Covered Soil Pile (SWMU 13), the Uncovered Soil Pile (SWMU 14),

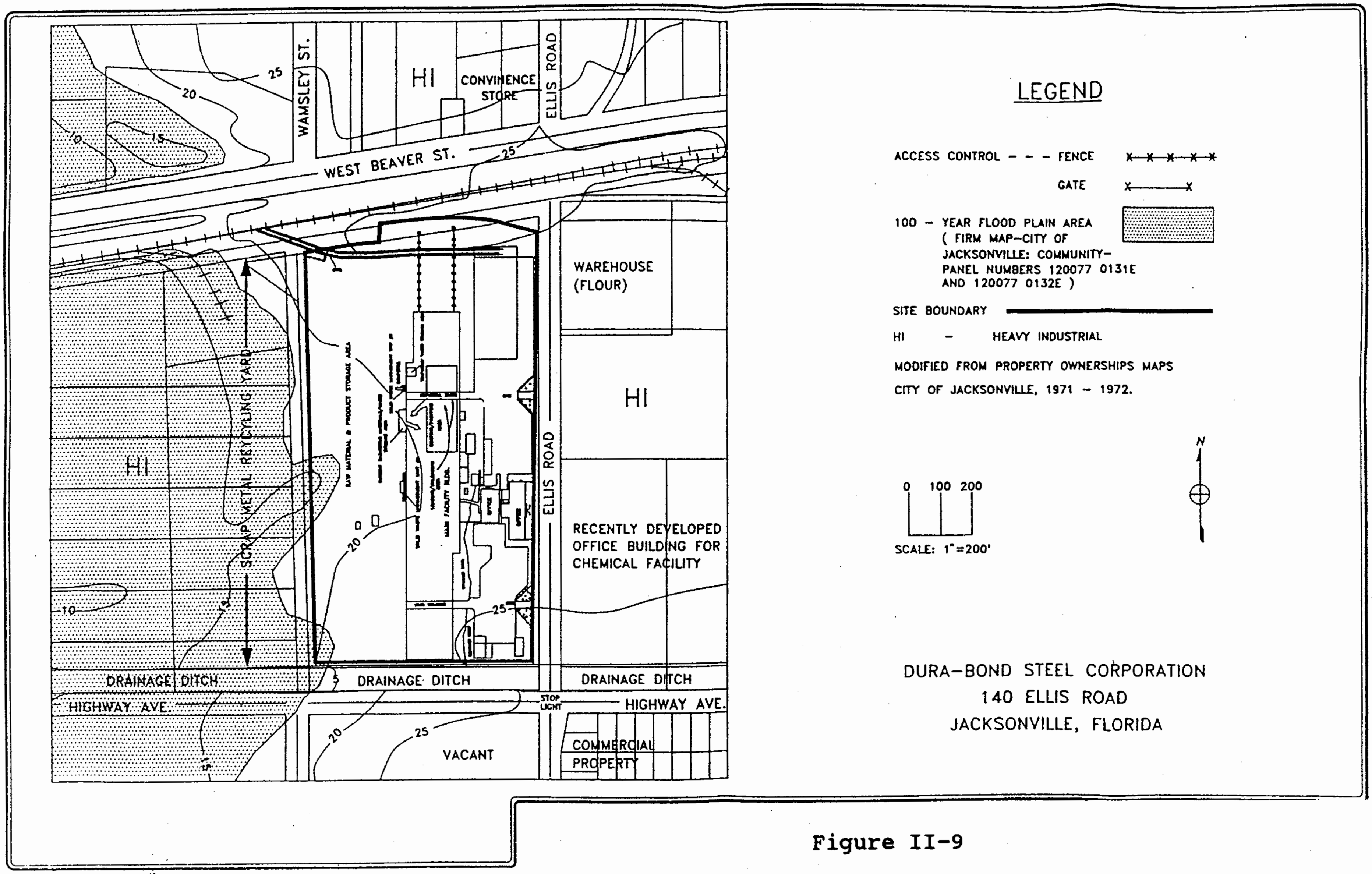


Figure II-9

100-Year Floodplain Area
(Reference 92)

and the Construction Debris Pile (SWMU 17). At the time of the VSI, there was evidence of runoff from the vicinity of the piles to this drain. A second grate is located approximately 30 feet south and 10 feet west of the Hazardous Materials/Waste Storage Area (SWMU 4). This grate appeared to have been added very recently. A third drain is located on the east side of the main facility building near the western edge of the south parking area. This storm water drain was clogged at the time of the VSI (Reference 100).

3. Soils and Geology

The Dura-Bond Steel Corporation facility is located on Urban land. In Duval County, Pelham and Mascotte soils may occur in a complex with Urban land. These areas consist of nearly level, poorly drained soils that are sandy to a depth of 20 inches or more and loamy below (Reference 1).

Pelham soils are nearly level and poorly drained. These soils typically have a surface layer of very dark gray loamy fine sand and a subsurface layer of light gray fine sand. The subsoil is light brownish gray fine sandy loam and sandy clay loam that begins at a depth of approximately 21 inches and extends to a depth of 69 inches or more. Under natural conditions, the water table is at a depth of less than 10 inches for 2 to 4 months and at a depth of 10 to 30 inches for 4 to 12 months during most years (Reference 1).

Mascotte soils are also nearly level and poorly drained. They typically have a surface layer of black fine sand and a subsurface layer of gray and light brownish gray fine sand. A layer of black, weakly cemented loamy fine sand occurs at a depth of approximately 15 inches. A layer of sandy clay loam occurs at a depth of approximately 28 inches and extends to a depth of approximately 58 inches. Below this is gray fine sand that extends to a depth of 80 inches or more. Under natural conditions, the water table is at a depth of less than 10 inches for 2 to 4 months out of the year and at a depth of 10 to 30 inches for 2 to 8 months during most years (Reference 1).

The Hawthorne Group is of middle Miocene age and is composed of gray to blue-gray calcareous, phosphatic sandy clays and clayey sands interbedded with thin, discontinuous lenses of fine to medium-grained phosphatic sandy limestone and gray, hard dolomite. The dolomite and limestone lenses are more prevalent near the Group base. The thickness of the Hawthorne Group ranges from approximately 250 feet in southern portions of the county to approximately 500 feet in the north-central portions. The Hawthorne Group acts as a confining unit of relatively impermeable clay, sandy clay, and dolomite beds that separates the shallow aquifer system from the Floridan system (Reference

92). Figure II-10 shows the lithostratigraphic units of the Hawthorne Group typical of the Duval County area. The upper Miocene and Pliocene deposits are composed of sand, shell, sandy clay, and limestone. The sediments contain less phosphate than the Hawthorne Group and are a light gray or buff color. The upper portions of the deposits consist of clayey sand and sandy clay. The middle section contains sandy clay and shell, while the lower portion contains interbedded sandy clay, clay, and porous bioclastic limestone. The thickness of the upper Miocene and Pliocene sediments range from approximately 10 feet in the extreme southwest area of Duval County to approximately 130 feet in the west-central county areas (Reference 92).

The uppermost sediments, consisting of Pleistocene and Recent deposits cover all of Duval County. These sediments are tan to yellow medium to fine-grained loose sands, and gray to green clayey sands. The deposits locally contain thin gray sandy clay beds, which, in some areas, contain mollusk shells (Reference 92).

4. <u>Ground Water</u>

Two principal aquifer systems are present under Duval County. The Floridan Aquifer represents a major source of ground water in the area. This aquifer is underlain by a confining bed and is overlain, throughout most of Florida, by the intermediate aquifer system. It is predominantly comprised of limestones, dolomites, and limestone-dolomite mixtures. Throughout most of the state, the quality of water in the upper portion of this aquifer is excellent (References 92, 98). Figure II-11 shows the ground water systems for the state of Florida.

The shallow aquifer system also underlies northeast Florida. It is comprised of sands, limestones, and dolomites. This system is used locally as a source of ground water. A third aquifer, the aquiclude, yields small to moderate amounts of ground water in Duval County (References 92, 98). Table II-11 shows the stratigraphic units and aquifer systems in Duval County.

The following formations comprise the Shallow aquifer system, in ascending order: the Hawthorne Group (middle Miocene), upper Miocene or Pliocene deposits, and Pleistocene and Holocene deposits (Reference 92).

The ground water in the uppermost levels of the shallow aquifer generally occurs under water table conditions. Layers of clay in the deeper parts of the aquifer can act as localized confining units. Because of the variations in lithology in the shallow aquifer system, the hydraulic properties of the system vary and local aquifers and confining units are discontinuous. The aquifer may consist of a single, relatively thick aquifer under

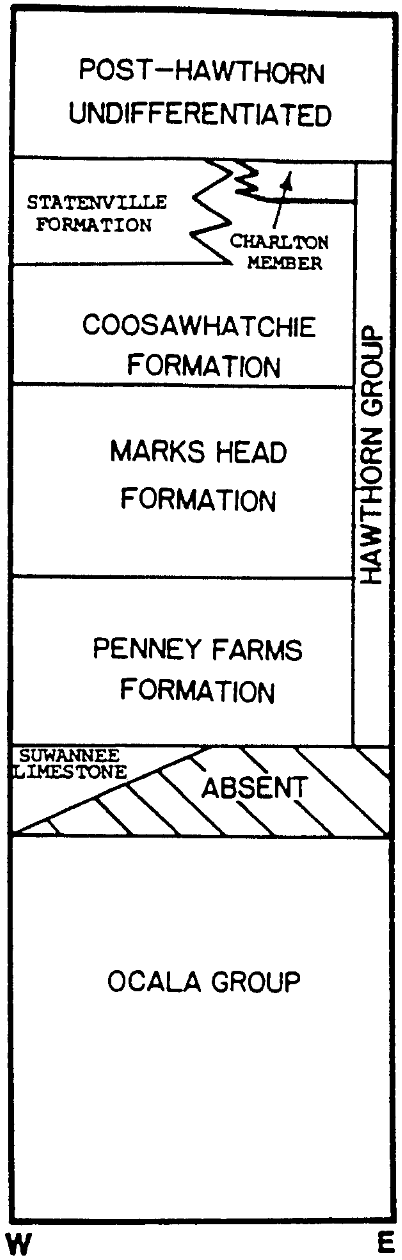
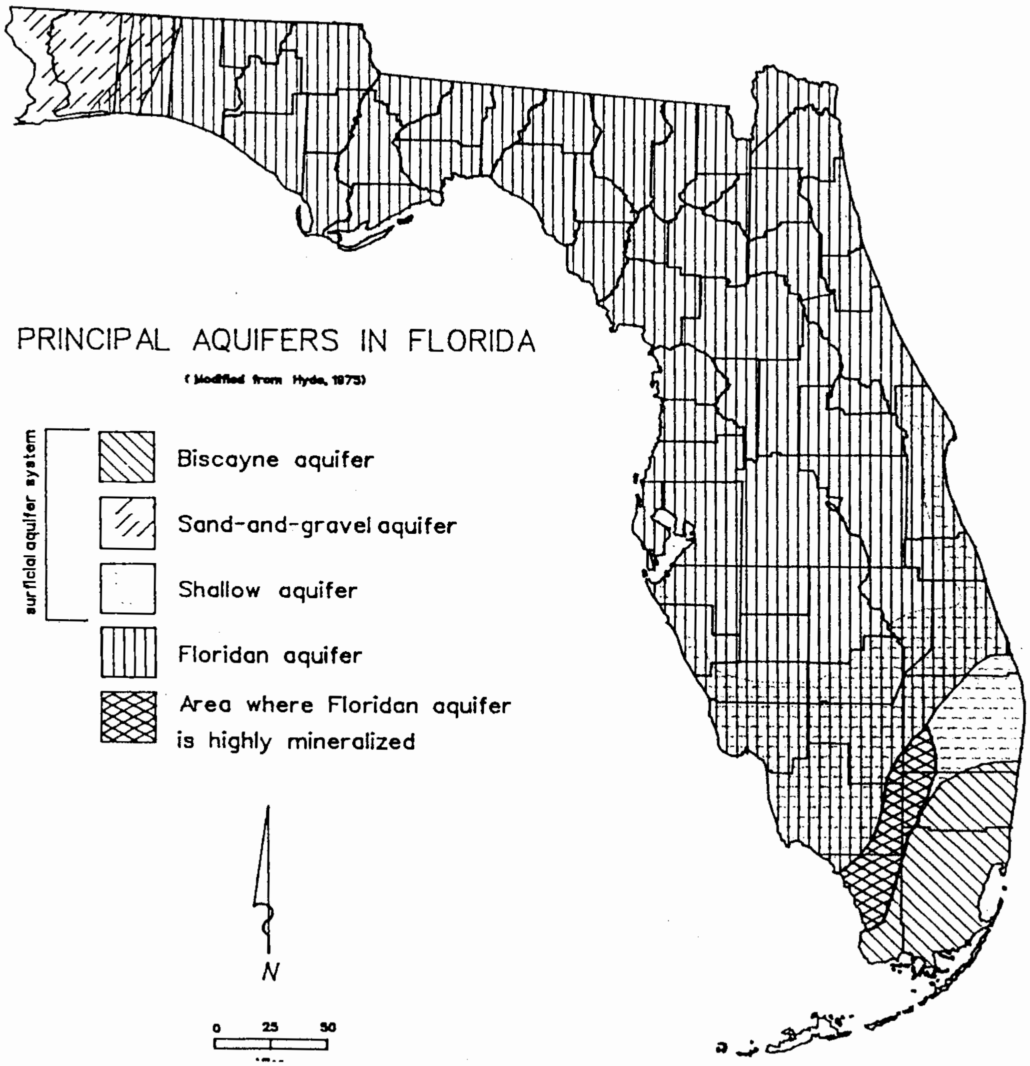


Figure II-10

Lithostratigraphic Units of the Hawthorne Group in North Florida (Reference 92)

Figure II-11

Principal Aquifers in Florida
(Reference 98)



able II-11

Stratigraphic Units and Aquifer Systems in Duval County
(Reference 92)

Geologic age	Statigraphic unit	App. thick-ness (ft.)	Lithologic character	Aquifer sytems	Water-bearing properties
Recent and Pleistocene	Recent Pleistocene deposits	0-150	Soil, muck, coarse to fine sand, shell and some clayey sand	Shallow aquifer system	Surficial sand yields small amounts of water. Sand and shell bed alon coast yields moderate quantities.
Pliocene?	Pliocene or Upper Miocene deposits	20-110	Gray-green calcerous, silty clay and clayey sand; contains shell beds and white soft, friable limestone beds		Limestone, sand, and shell bed near base of deposits yields moderate to (locally) large amounts.
Miocene	Hawthorn Formation	260-490	Gray to blue-green calcareous phospatic, sandy clays and clayey sands; contains fine to medium phosphatic sand lenses and lime-stone and dolomite beds, partic-ularly near the base of the formation	Aquiclude	Relatively impermeable clays and amrls in both the late Micoene or Pliocene deposits and the Hawthorn Formation confines the artesian water in the Eocene limestone and in the limestone and shell beds above the Eocene limestone. Yields small to moderate supplies.
Eocene	Crystal River Formation (Ocala Group)	50-300	White to cream chalk, massive fossiliferous marine limestone	Floridan Aquifer System	Marine limestone formations utilized as the primary source of water in the area.
	Williston Formation (Ocala Group)	20-100	Tan to buff granular, marine limestone		
	Inglis Formation (Ocala Group)	40-120	Tan to buff granular, calcitic, marine limestone; contains thin dolomite lenses and zones of Miliolidae foraminiferal coquina		
	Avon Park Limestone	50-250	Alternating beds of brown to tan hard, massive dolomite, brown finel crystalline dolomite, and granular calcitic limestone		Massive dolomite beds restrict vertical movement of water. (Part of the Aquiclude Aquifer system)
	Lake City Limestone	425-500+	White to brown, purple-tinted lignitic, granular limestone and gray hard, massive dolimite; contains lignite beds and zones ov Vivulinidae foraminiferal coquina		Limestone and porous dolomite beds yield large to very large quantities of water. Hard dolomite and limestone beds restrict verical movement of water within certain zones. Potentially the greatest source of water in the area.
	Oldsmar Limestone	846	Cream to brown massive to chalky, granular limestone and tan to brown massive to finely crystalline dolomite		

water table conditions in western parts of the county, while in central and eastern parts of the county, it may consist of several thin permeable zones separated locally by thin confining units. The water table gradient and direction of ground-water movement is generally controlled by topography and surface water patterns (Reference 92).

Water from the shallow aquifer, which serves as a supply for many users, is drawn to the surface by wells 40 feet to 150 feet deep. Figure II-12 is a map of Duval County showing the potentiometric surface of the shallow aquifer system and the area of flow in May 1969. According to the facility's soil sampling and analysis plan, the ground-water level is estimated to be eight to ten feet below the surface of the site (References 92, 37).

The uppermost sediments of the Floridan aquifer system were deposited during the formation of marine terraces and beach ridges. They are comprised of Pleistocene and Recent deposits and cover all of Duval County. The sediments are primarily tan to yellow medium-to-fine-grained loose sands and gray to green clayey sands. Local deposits consist of gray sandy clay beds which contain mollusk shells in some places (Reference 92). Figure II-13 shows these sediments overlaying the Ocala Limestone of the Floridan Aquifer.

The Floridan Aquifer system underlies the Hawthorne Group and is comprised of the Ocala Group, the Avon Park Limestone, and the Lake City Limestone. These are all of Eocene age. The units are hydraulically connected with limestone of the lower Hawthorne formation. The Ocala Group is composed of permeable hydraulically connected marine limestone beds that contain few hard dolomite or limestone beds to restrict the vertical movement of water. The Avon Park Limestone is composed almost wholly of hard, relatively impermeable dolomite beds that restrict the vertical movement of water between the underling and overlying permeable zones. The Lake City Limestone and Oldsmar Limestone contain alternating hard, relatively impermeable dolomite confining beds and soft, permeable limestone water-bearing zones (Reference 92). The Oldsmar Limestone generally yields saline water and is not considered part of the Floridan system. Variations in the top of the Floridan Aquifer near Jacksonville are depicted in Figure II-14.

Dura-Bond is located on the Pamlico Marine Terrace which ranges from 5 to 25 feet above NGVD. The subsurface lithologies at the site were determined from split-spoon samples collected from two test borings and borings completed during the installation of monitoring wells MW-1 through MW-7. Figure II-15 shows the lithologic sections from the two test borings. The lithologies for the MW-1 through MW-7 boreholes are composed of interbedded layers of clayey sand, sandy clay, and clay. From a depth of

Figure II-12

Map of Duval County Showing the Potentiometric Surface
of the Shallow Aquifer System and the Area of Flow in May 1969
(Reference 92)

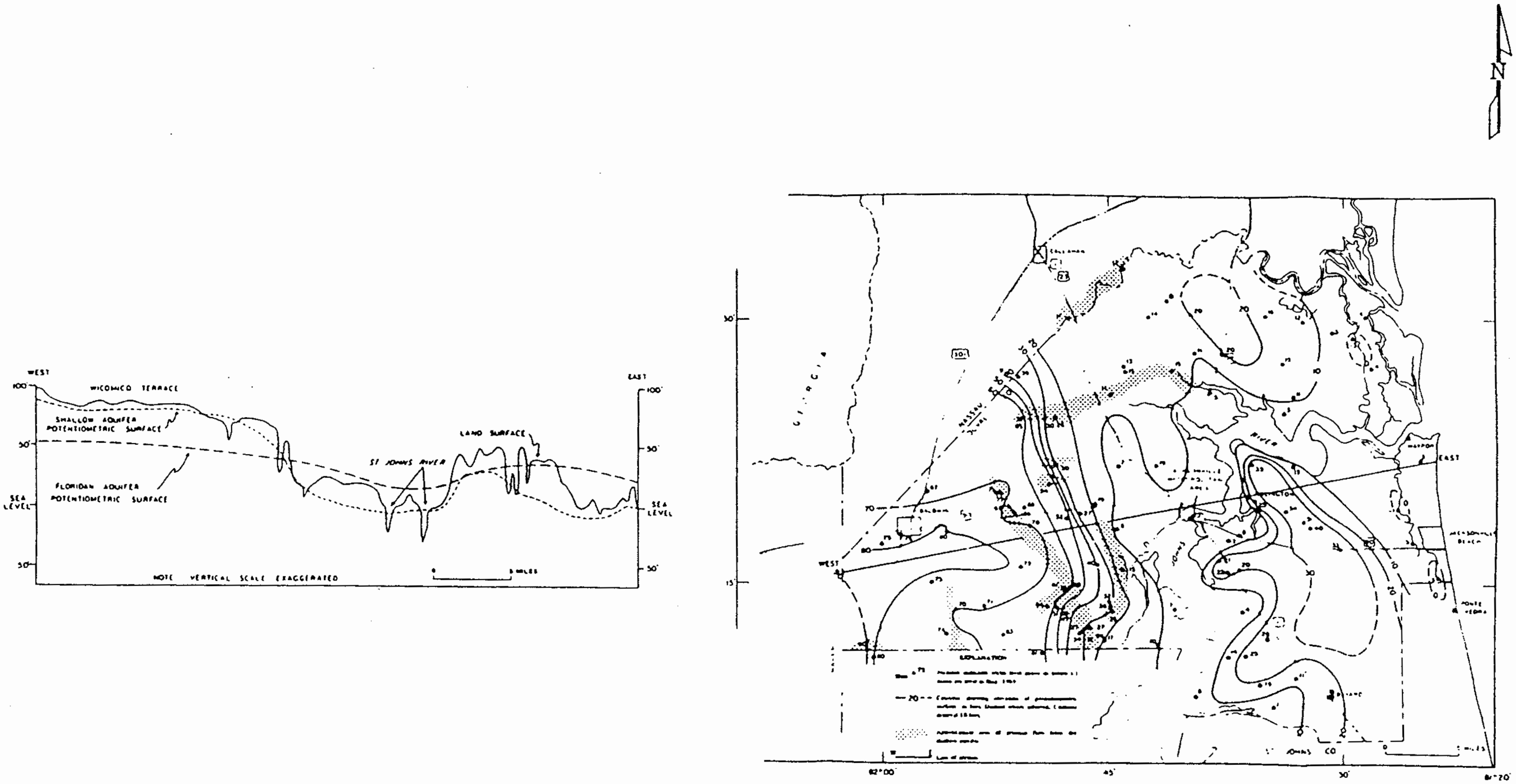


Figure II-13

Map of Duval County Showing the Sediments
Overlaying the Ocala Limestone of the Florida Aquifer
(Reference 92)

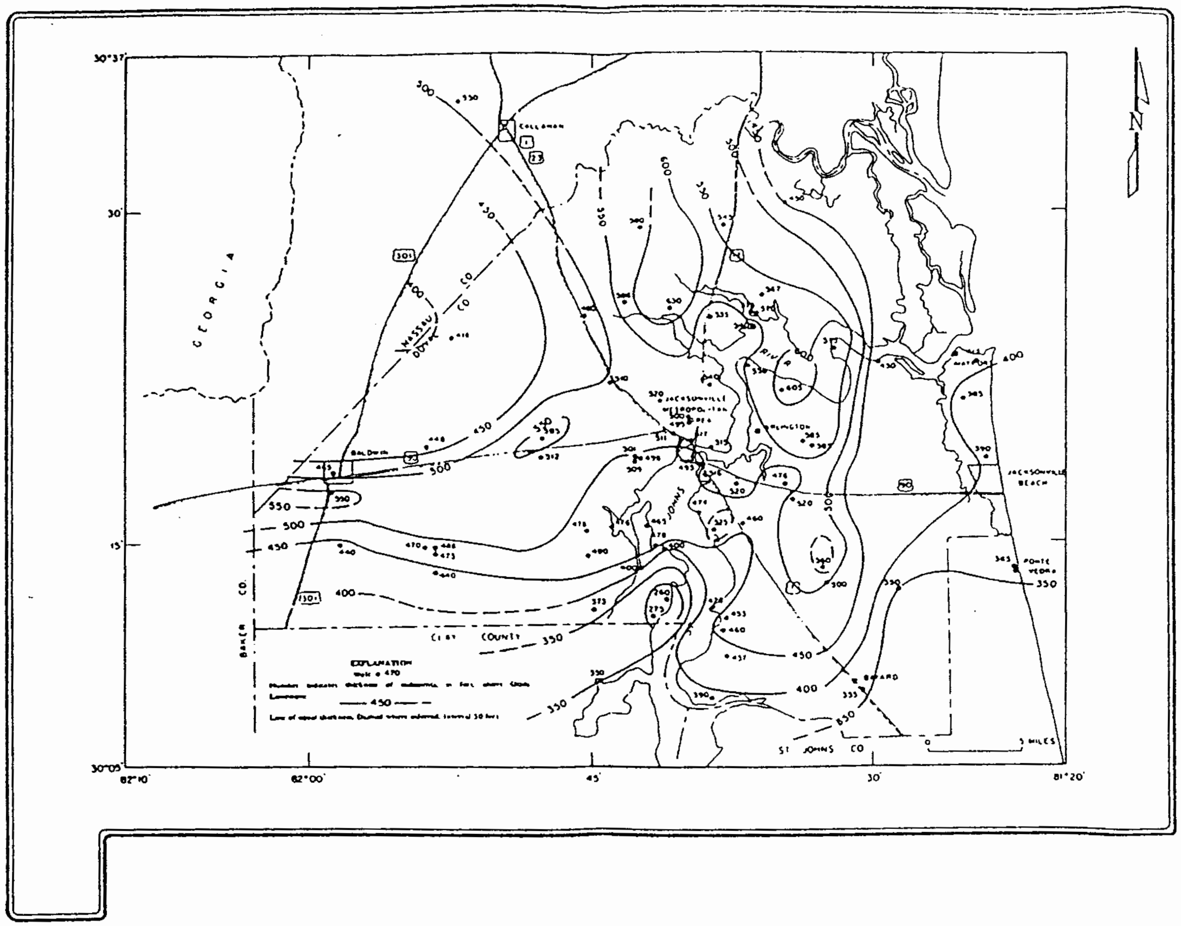


Figure II-14

Top of Floridan Aquifer in Northeast Florida
(Reference 92)

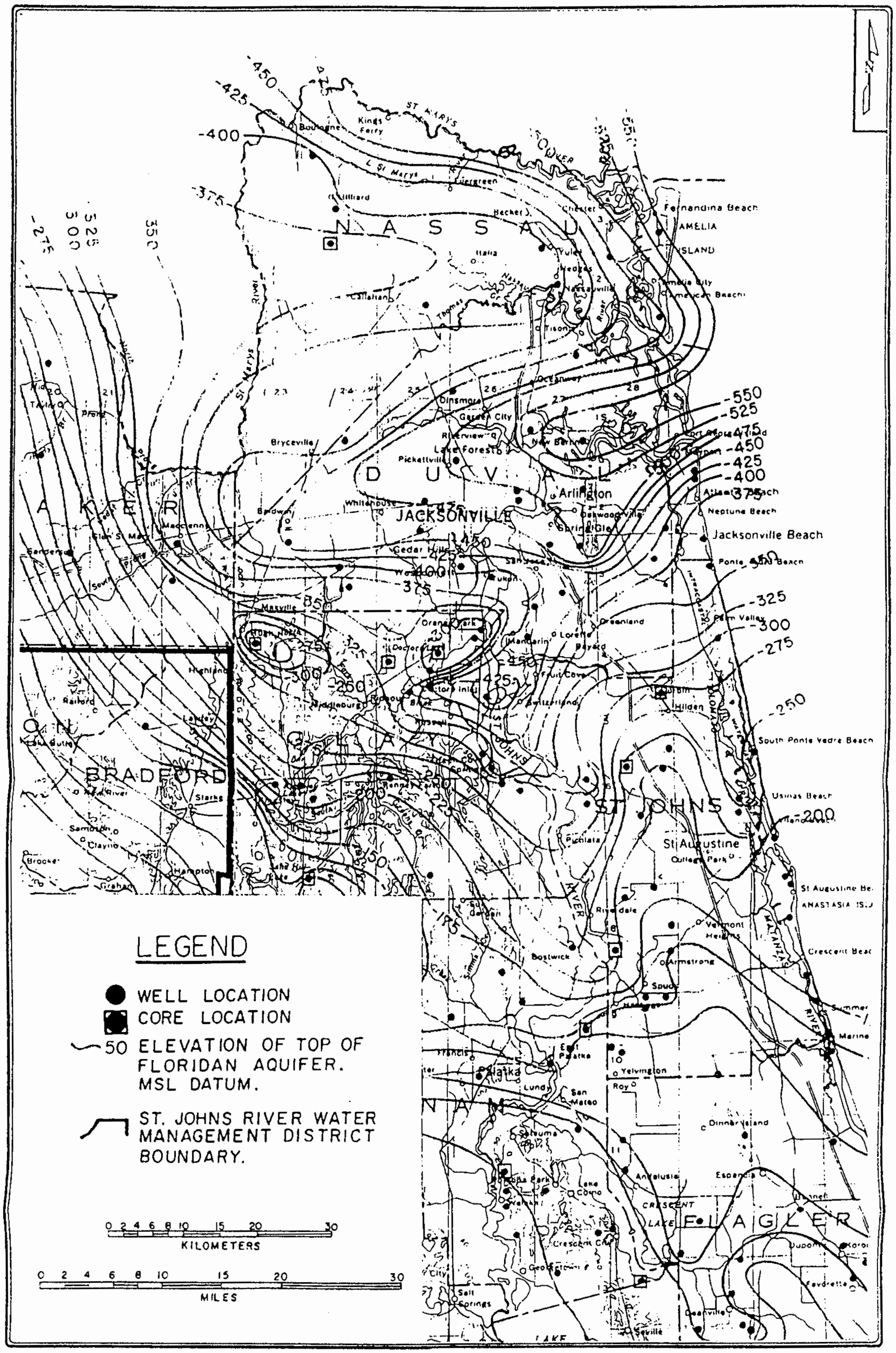
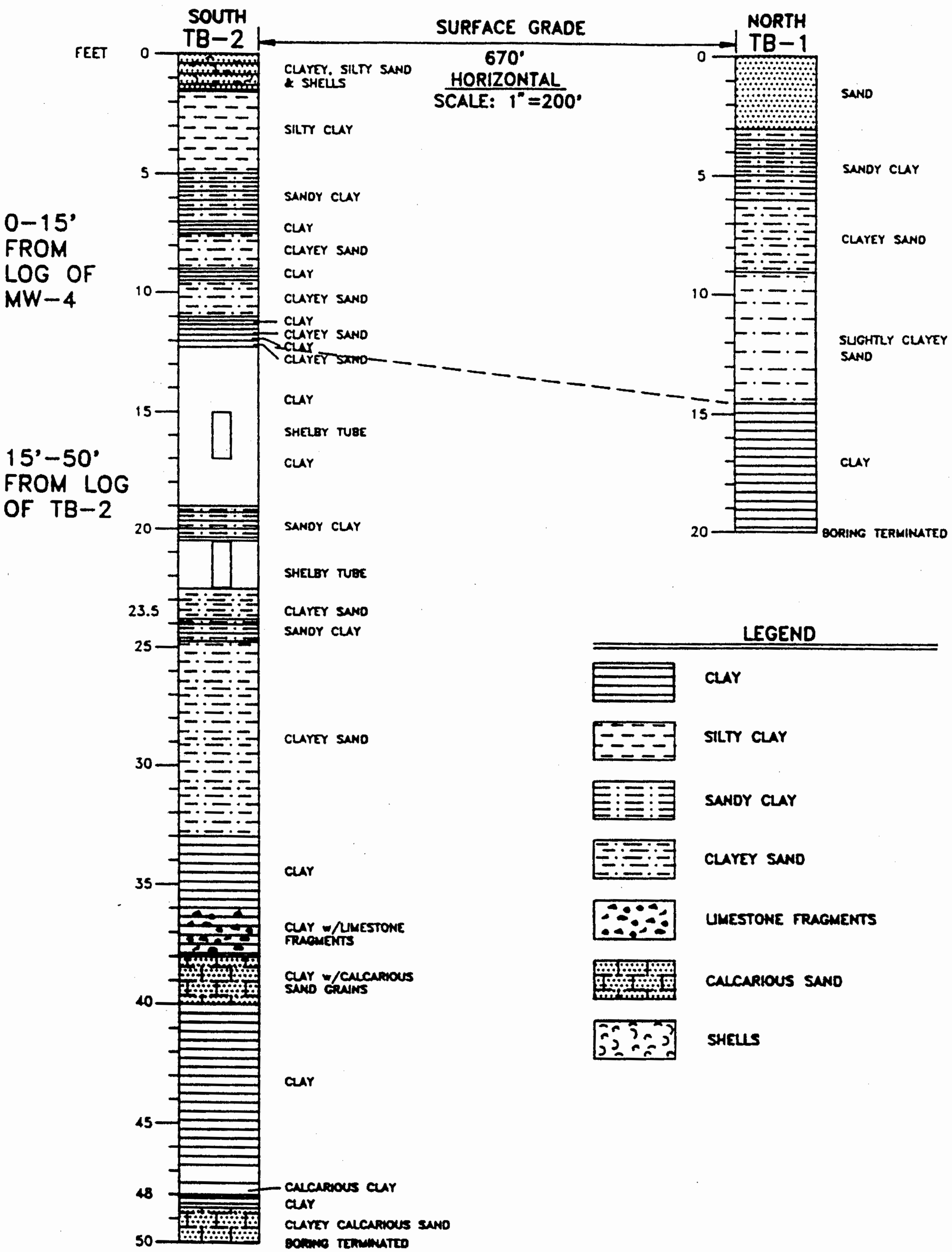


Figure II-15

Lithologic Sections from Two Test Borings
(Reference 92)



approximately 14 feet below land surface (bls) to 20 feet bls, the borings encountered a layer of dense, plastic green clay. The dense clay is continuous across the site at a depth of approximately 12 to 15 feet, according to Missimer & Associates, who conducted the tests and sampling. Ground-water elevation at the site was measured in piezometers PZ-1 and PZ-2 and ground-water wells MW-1 through MW-3. These indicated that shallow ground-water flows to the south-southeast (Reference 92).

Figure II-16 shows the ground-water elevations and direction of ground-water flow at the site, as determined on June 27, 1991. Figure II-17 shows the ground-water elevations and direction of ground-water flow at the site, as determined on July 8, 1991. Ground water elevation contours calculated in January 1992, and April 1992 are shown in Figure II-18 and Figure II-19, respectively. The average hydraulic conductivity measured in wells MW-3, MW-4, MW-5, and MW-7 was found to be 0.38 foot/day. Analyses of the dense, plastic green clay indicated that the layer is relatively impermeable and acts as a confining unit at the site. Due to the presence of a seepage face along the northern edge of the Highway Avenue drainage ditch, shallow ground water beneath the facility discharges to the ditch, according to Dura-Bond's Closure Permit Application (Reference 92).

A former process well of unknown depth is located on the Dura-Bond facility. There are seven other ground-water wells within a quarter mile radius of the Dura-Bond property (Reference 99).

5. Receptors

Dura-Bond is located in an area zoned as Heavy Industrial. Neighboring facilities include an office building across the street and a scrap metal yard adjacent to the property to the west.

Receptors for the site include employees and nearby surface water bodies. Surface water runoff is collected in a Drainage Ditch (SWMU 19) which runs from the northern end of the facility near the Wheelabrator® Dust Collector (SWMU 5) and Sandblast Residue Fill Area (SWMU 8) to the southern fence line, along the east side of the main facility building. The ditch discharges through a double concrete culvert and double metal discharge pipe to the Highway Avenue drainage ditch. The water in this drainage ditch flows from east to west. It eventually discharges to the Cedar River which flows in a southerly direction and joins the Ortega River that empties into the St. Johns River.

Due to the presence of a seepage face along the northern edge of the Highway Avenue drainage ditch, shallow ground water beneath the facility discharges to the ditch, according to Dura-Bond's

Figure II-16

Ground Water Elevations (in feet above NGVD) and
Direction of Ground-Water Movement
June 27, 1991 (Reference 92)

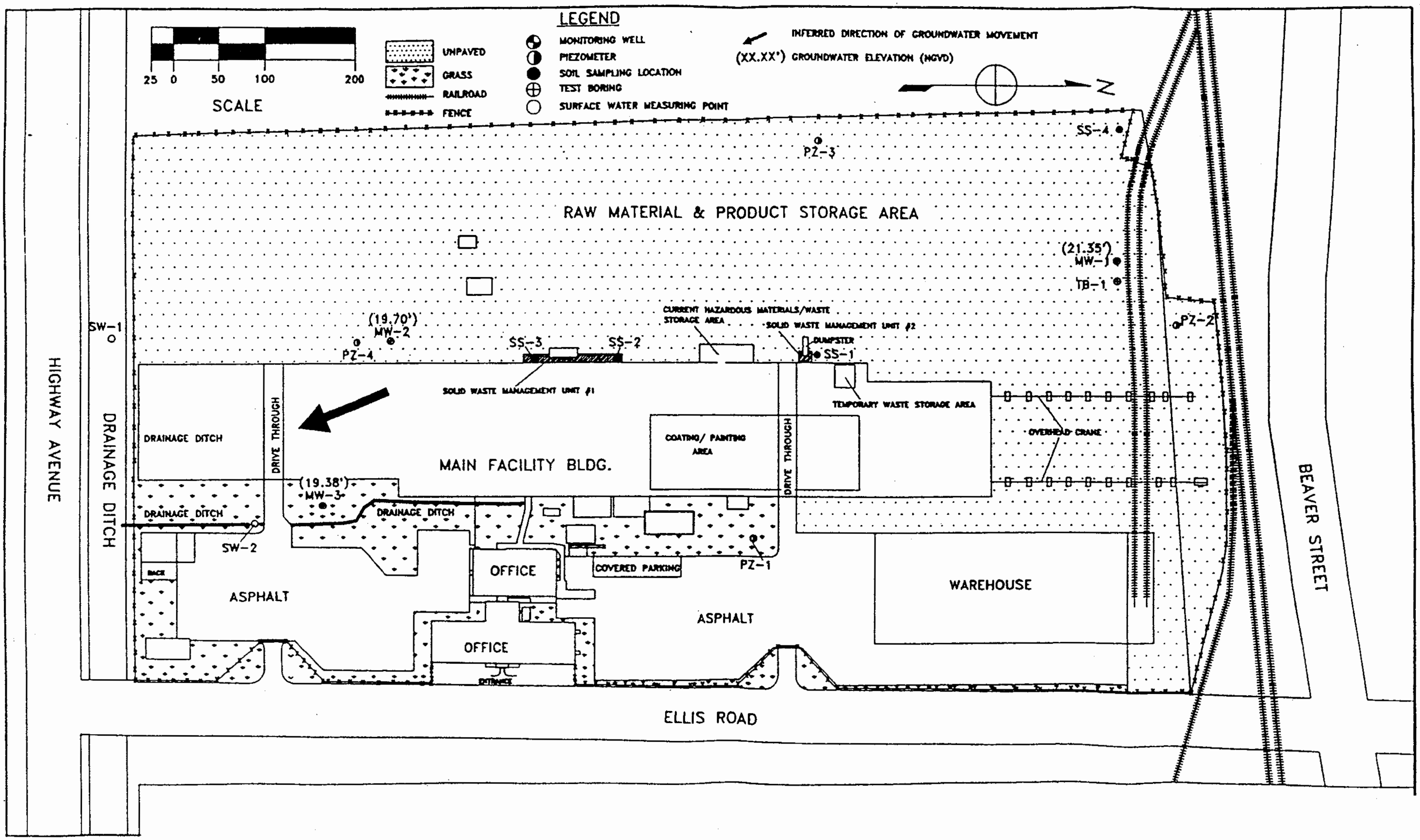


Figure II-17

Ground-Water Elevations (in feet above NGVD) and Direction of Ground-Water Movement July 8, 1991 (Reference 92)

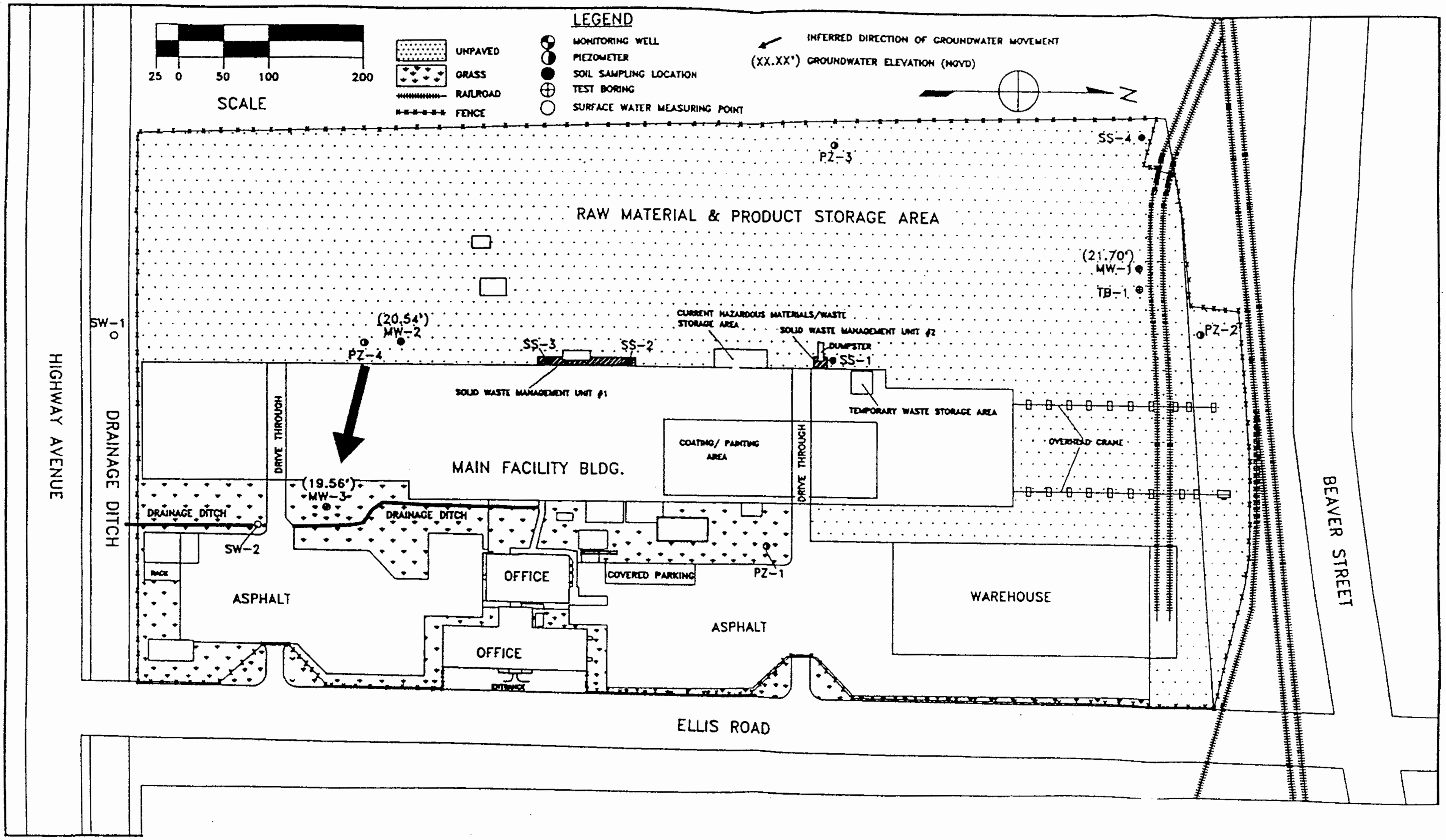
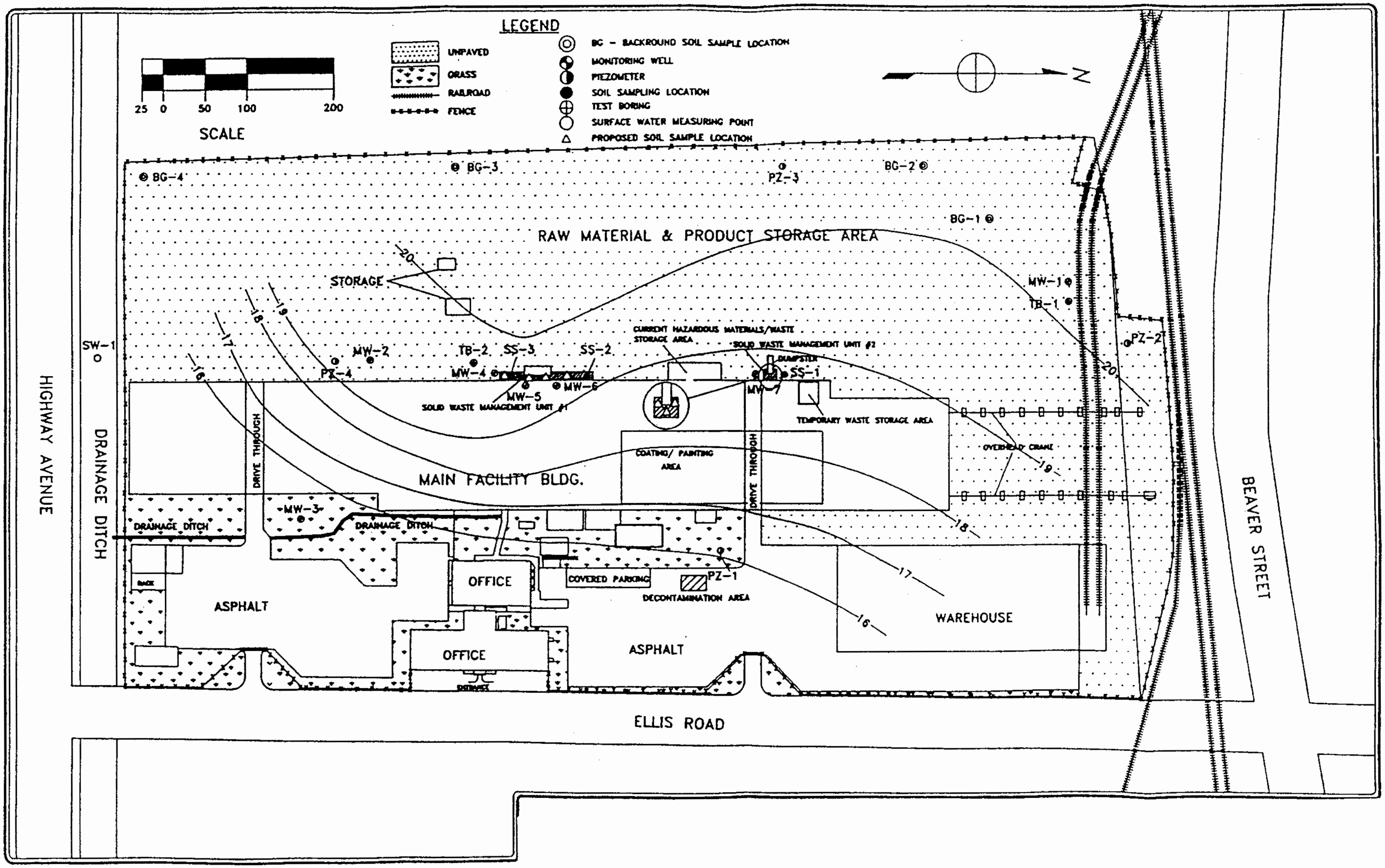


Figure II-18

Ground-Water Elevation Contours
January 16, 1992 (Reference 92)



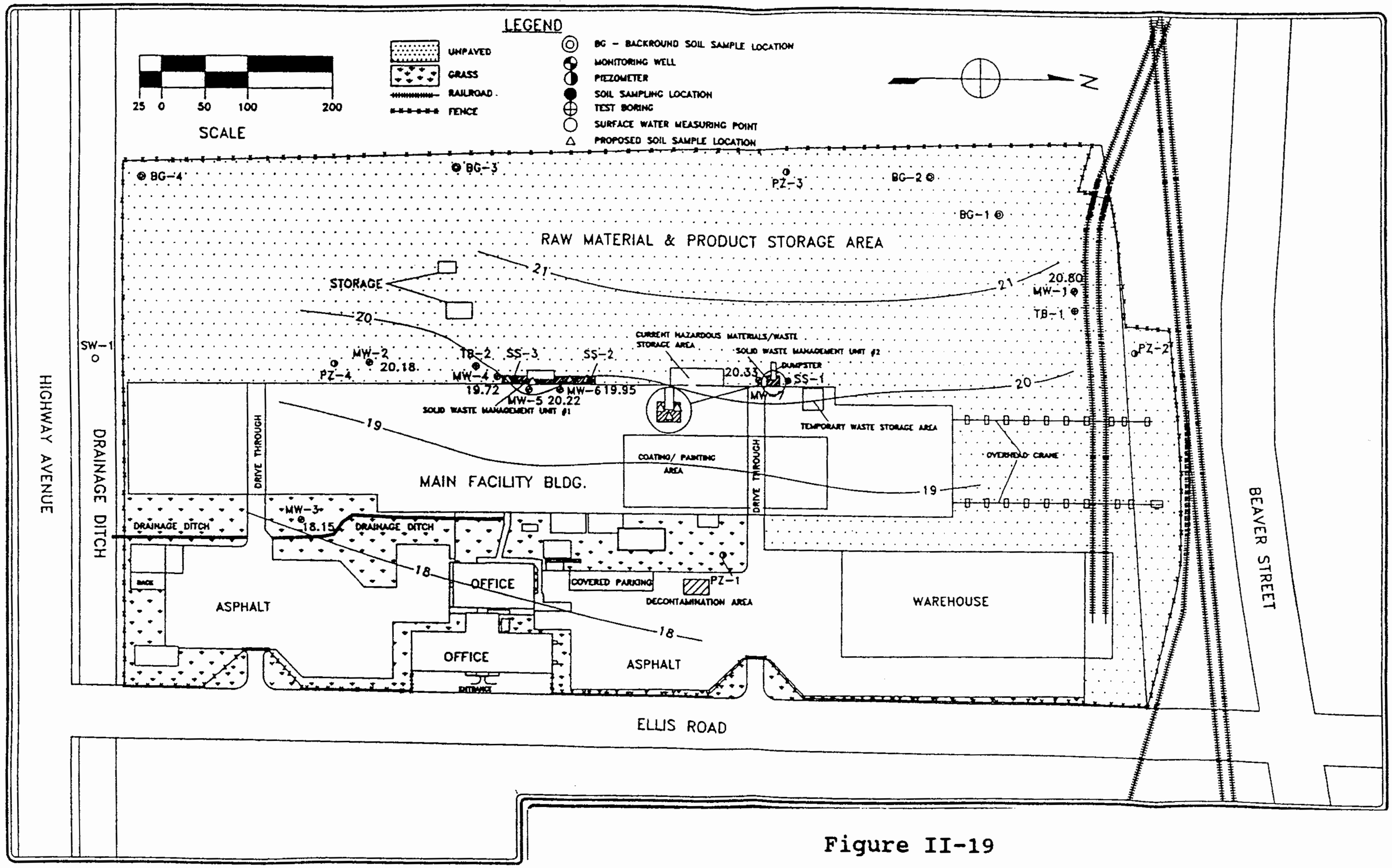


Figure II-19

Ground-Water Elevation Contours
April 16, 1992 (Reference 92)

Closure Permit Application (Reference 92). Given the proximity of the Paint Cans Excavation Area (SWMU 12) to the northern edge of the ditch, there is a high likelihood that contamination from the paint cans may have entered the ditch.

III. SWMU AND AOC DESCRIPTIONS

This section presents descriptions of Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) identified during the PR and VSI of the Dura-Bond facility.

A SWMU and AOC map is provided in Appendix C. The following designations are used to designate release pathways:

L (Low)	Minimal potential for release
M (Medium)	Moderate potential for release
H (High)	Evidence suggests that release(s) have occurred
U (Unknown)	No information is available

The photograph numbers correspond to the numbering system of the Photographic Log provided in Appendices B and C. Appendix B contains photographs taken at the time of the VSI, and Appendix C presents photographs taken by FDER during a site inspection in October 1990. The roll number and photograph number of each photograph are provided at the end of each legend to cross-reference the Photographic Log to the VSI Log Book in which the sequence of photographs was recorded.

SWMU DATA SHEET

SWMU NUMBER: 1 **PHOTOGRAPH NUMBER:** 1.1, 1.2, 1.3, 1.4 1.5, 1.6, 1.7, 1.8

NAME: Area Adjacent to West Side of Main Facility Building

TYPE OF UNIT: Land Treatment Unit

PERIOD OF OPERATION: 1987 to 1992

PHYSICAL DESCRIPTION AND CONDITION: This area was previously identified as a SWMU in a FDER warning notice, following a Hazardous Waste Facility Inspection in October 1990. This unit lies parallel to the main facility building on the western side, near a small storage building. It consists of an earthen area approximately 25 feet by 5 feet between the western wall of the main facility building and an adjacent corrugated metal storage shed which houses tanks of compressed oxygen and carbon dioxide. In several places along the western wall of the main facility building, there are openings in the corrugated metal walls through which workers allegedly emptied out their spray guns in a fine spray mist.

During the 1990 inspection, the soil between the two buildings was darkly stained and in many places the vegetation had been destroyed as seen in FDER photographs 1.5 through 1.10 in Appendix C.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: The unit received methyl ethyl ketone (MEK)/paint waste from the paint spray guns following coating and painting operations within the main building. The waste was characterized as F005. An analysis of the waste revealed constituent chemicals at the following levels: MEK, 360,000 mg/l; toluene, 14,000 mg/l; ethylbenzene, 6,600 mg/l; xylenes, 29,000 mg/l; barium, 33 mg/l; cadmium, 0.18 mg/l; chromium, 58 mg/l; and lead, 16 mg/l.

RELEASE PATHWAYS: Air (M) Surface Water (H) Soil (H) Ground Water (H) Subsurface Gas (M)

HISTORY AND/OR EVIDENCE OF RELEASE(S): In several places along the western wall of the main facility building, there are openings in the corrugated metal walls through which workers allegedly emptied out their spray guns in a fine mist. The surrounding soil was stained, according to the FDER report.

Soil sampling was preformed by RSDI Environmental, Inc. in February 1991. Two of the borings were located adjacent to the SWMU area. The samples were analyzed for MEK using EPA Method 8015. The concentration of MEK in the soil at the southern end of this unit ranged from 12.80 mg/kg to 18.20 mg/kg. The MEK concentration in the soil at the northern end of this area ranged from 17.30 mg/kg to 25.90 mg/kg mg/kg.

Sampling was performed by Missimer & Associates, Inc. at two hydraulically downgradient wells on June 25, 1991. MW-2 is located near the western edge of the main facility building and MW-3 is located near the eastern edge of the building. The samples were analyzed for VOCs using EPA Method 8240, as well as the eight RCRA metals. Barium was detected at 0.11 mg/l in the sample from MW-2. Arsenic (0.029 mg/l), chromium (0.14 mg/l), and lead (0.72 mg/l) were detected in the sample from MW-3. The lead concentration exceeded the State of Florida Primary Drinking Water Standards MCLs for lead (0.05 mg/l). A sample taken on July 8, 1991 revealed arsenic (0.016 mg/l) and lead (0.045 mg/l) in the water. Filtered samples on June 25, 1991 at MW-2 indicated 0.11 mg/l barium. Filtered samples at MW-3 indicated 0.76 mg/l barium and 0.012 mg/l lead.

Further ground-water samples were taken immediately south of this area at MW-4 and in two locations within the main building at MW-5 and MW-6. These samples were taken on May 12, 1992. The results for all VOCs were also below detection limits. Except for barium, the results for all metals were below detection limits. Barium was detected at 0.059 mg/l, 0.068 mg/l, and 0.045 mg/l at MW-4, MW-5, and MW-6, respectively.

Soil samples were taken in two locations within this area in June 1991. SS-2 was taken from the northern end of the area and SS-3 from the southern end of the area. All VOCs were below detection limits at both borings. For metals, arsenic, chromium, and lead were detected in concentrations of 17 mg/kg, 2.9 mg/kg, and 3.3 mg/kg, respectively, at SS-2, and 34 mg/kg, 16 mg/kg and 82 mg/kg, respectively, at SS-3. Mercury was detected at 0.059 mg/kg at SS-3. Background concentrations determined in July 1991 in the far northwest corner of the facility indicated 18 mg/kg, 6.0 mg/kg, and 26 mg/kg, for arsenic, chromium, and lead, respectively. Background levels for mercury were not analyzed. A map showing the locations of the soil borings and monitoring wells is provided in Figure II-7 on page II-30.

RECOMMENDATIONS:

No Further Action (*)
Confirmatory Sampling ( )
RFI Necessary ( )

REFERENCE(S):

20, 37, 39, 42, 92, 99, 100

COMMENTS:

* Following the soil sampling for this area in February 1991, results for MEK were below detection limits for subsequent ground-water and soil samples in the same area. The initial high concentrations of MEK in soil and the subsequent results for metals in soil and ground water warrant further investigation as to the extent and magnitude of contamination of the environmental media in this area.

No further action for this unit has been suggested because this unit is regulated by FDER.

SWMU NUMBER: 2 **PHOTOGRAPH NUMBER:** 2.1, 2.2, 2.3, 2.4, 2.5

NAME: Area Immediately Adjacent to Dumpster

TYPE OF UNIT: Land Treatment Unit

PERIOD OF OPERATION: 1987 to 1992

PHYSICAL DESCRIPTION AND CONDITION: This unit is located on the west side of the main facility building, north of the north drive-through. This SWMU encompasses an area approximately 20 feet long by 20 feet wide. The area is composed of bare soil with scattered vegetation. Approximately 1000 rags per month which were used for cleaning paint guns and equipment with MEK solvent were disposed in an adjacent dumpster, according to an October 1990 FDER inspection report. During this inspection, FDER officials noted the presence of approximately ten drums and numerous smaller containers in the vicinity of the dumpster as seen in FDER photographs 2.2, 2.3, and 2.4 in Appendix C. A large brown collection bin is now used to accumulate facility refuse in place of the BFI dumpster.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: This unit managed MEK waste contaminated rags. Approximately 1000 rags were generated and disposed of in the dumpster each month. FDER officials also noted the presence of approximately ten drums and numerous smaller containers in the vicinity of the dumpster.

RELEASE PATHWAYS: Air (M) Surface Water (H) Soil (H)
Ground Water (H) Subsurface Gas (M)

HISTORY AND/OR EVIDENCE OF RELEASE(S): MEK/paint waste was allegedly discharged to the ground in an area immediately adjacent to the dumpster. FDER officials noted the presence of approximately ten drums and numerous smaller containers in the vicinity of the dumpster.

Soil sampling was preformed by RSDI Environmental, Inc. in February 1991. Samples were taken in an area adjacent to the dumpster described above. The samples were analyzed for MEK using EPA SW846 Method 8015. The concentration of MEK in the soil ranged from 19.60 mg/kg to 19.70 mg/kg. Soil samples were taken at this unit in June 1991. SS-1 was taken from the northern end of the SWMU. All VOCs were below detection limits at both borings. For metals, arsenic, chromium, lead, and mercury were detected in concentrations of 15 mg/kg, 2.1 mg/kg, 6.4 mg/kg, and 0.017 mg/kg, respectively. Background concentrations determined in July 1991 in the far northwest corner of the facility indicated 18 mg/kg, 6.0 mg/kg, and 26 mg/kg, for arsenic, chromium, and lead, respectively. A map showing the locations of the soil borings and monitoring wells is provided in Figure II-7 on page II-30.

RECOMMENDATIONS: No Further Action (*)
Confirmatory Sampling ( )
RFI Necessary ( )

REFERENCE(S): 20, 37, 39, 42, 92, 99

COMMENTS: * Following the soil sampling at the dumpster area in February 1991, results for MEK were below detection limits for subsequent soil and ground-water samples in the same area. The initial high concentrations of MEK in soil and the subsequent results for arsenic, chromium, and lead, warrant further investigation as to the extent and magnitude of contamination of environmental media in this area.

No further action for this unit has been suggested because this unit is regulated by FDER.

SWMU DATA SHEET

SWMU NUMBER: 3 **PHOTOGRAPH NUMBER:** 3.1, 3.2, 3.3

NAME: Temporary Waste Storage Area

TYPE OF UNIT: Drum Storage Area

PERIOD OF OPERATION: 1987 to 1992

PHYSICAL DESCRIPTION AND CONDITION: This unit was one of two areas near the main facility building which were designated as hazardous material storage areas in Dura-Bond's Closure Permit Application. This area is located to the north of the north driveway along the inside western wall of the main facility building. It consists of a 15 feet by 15 feet concrete pad which stored paint waste. The pad is lined with steel and surrounded by soil. The soil surrounding the pad was dark in color at the time of the VSI. Between 2 and 20 drums were stored at one time in this area. On average, three to five drums were stored on the pad at any one time, according to Dura-Bond officials. The storage pad now stores two welding machines. The October 1990 FDER hazardous waste inspection report stated that there were five 55-gallon drums of F005 waste MEK accumulating in this area at that time. However, eight drums can be seen in FDER photograph 3.3 in Appendix C. The surrounding oil was darkly stained where oil appears to have been discharged. Three drums were open and none were labeled with hazardous waste labels.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: The unit received drummed MEK/paint waste following coating and painting operations within the main building. The unit contained waste which was characterized as F003 and F005. An analysis of the waste revealed constituent chemicals at the following levels: MEK 360,000 mg/l; toluene, 14,000 mg/l; ethylbenzene, 6,600 mg/l; xylenes, 29,000 mg/l; barium, 33 mg/l; cadmium, 0.18 mg/l; chromium, 58 mg/l; and lead, 16 mg/l. Approximately one 55-gallon drum of epoxy and oil-based paint sludge was generated a month. Paint waste also included old paint that was not inventoried. According to Mr. Norris, drums which were filled with paint sludge were then shipped offsite for disposal through Chem Con. At the time of the VSI, two bags of Black Beauty™ were lying on the dirt floor. Both bags were broken and leaking this material to the surrounding area.

RELEASE PATHWAYS: Air (L) Surface Water (M) Soil (M) Ground Water (M) Subsurface Gas (U)

HISTORY AND/OR EVIDENCE OF RELEASE(S): No evidence of unpermitted releases was identified in the available file material. The spilled Black Beauty™ was observed during the VSI. However, the 1990 FDER report and photographs indicate that a dark oily substance appeared to have been spilled in this area.

RECOMMENDATIONS:
No Further Action ( )
Confirmatory Sampling (*)
RFI Necessary ( )

REFERENCE(S): 20, 92, 99, 100, 101, 103

COMMENTS: * The facility should determine the extent of any leakage from drums that may have been stored here. In addition, it is unknown to what extent contamination may have occurred as a result of Black Beauty™ being spilled in the vicinity of this unit. Black Beauty™ is a by-product of the combustion of coal which is processed into an abrasive product. It typically is composed of fused ferro-alumino-silicate which is formed when molten slag is quenched in cold water. The end result is a course non-crystalline black glass. Black Beauty™ contains several hazardous constituents including antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, selenium, silver, thallium, vanadium, and zinc. There is concern that Black Beauty™ could enter environmental media through runoff to surface water or leaching to ground water. If the confirmatory sampling reveals that hazardous constituents are present in the surrounding media, then further investigation of the unit is warranted.

SWMU DATA SHEET

SWMU NUMBER: 4 **PHOTOGRAPH NUMBER:** 4.1, 4.2, 4.3, 4.4

NAME: Hazardous Materials/Waste Storage Area

TYPE OF UNIT: Drum Storage Area

PERIOD OF OPERATION: 1987 to 1992

PHYSICAL DESCRIPTION AND CONDITION: In Dura-Bond's Closure Permit Application, an area along the western wall outside of the main facility building was designated as a hazardous materials/waste storage area. This area is comprised of a 15 feet by 40 feet abutment of the main facility building with a concrete floor. According to Mr. Elrod, the area housed drums of MEK product after they were unloaded from the delivery trucks onto the pad through the double doors. Paint sludge was accumulated in drums along the south side of the area. A Drum Master™ distillation unit was also used in this area to distill spent MEK from the MEK paint mixture for reuse. A dark stain was observed on the cement floor at the southern end of the unit during the VSI.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: The unit received drummed MEK/paint waste following coating and painting operations within the main building. The unit contained waste which was characterized as F005. An analysis of the waste revealed constituent chemicals at the following levels: MEK 360,000 mg/l; toluene, 14,000 mg/l; ethylbenzene, 6,600 mg/l; xylenes, 29,000 mg/l; barium, 33 mg/l; cadmium, 0.18 mg/l; chromium, 58 mg/l; and lead, 16 mg/l. The distillation unit could distill five to six gallons of MEK/waste paint per hour. There is no diking around the edge of the concrete pad and there were gaps between the metal walls and the concrete pad at the time of the VSI.

RELEASE PATHWAYS: Air (M) Surface Water (H) Soil (H)
Ground Water (H) Subsurface Gas (M)

HISTORY AND/OR EVIDENCE OF RELEASE(S): This area housed drums of MEK product after it was unloaded from the delivery trucks onto the pad. Paint sludge was accumulated in drums along the south side of the area. A dark stain was observed on the cement floor at the southern end of the unit during the VSI.

SWMU DATA SHEET

RECOMMENDATIONS: No Further Action ( )
Confirmatory Sampling (*)
RFI Necessary ( )

REFERENCE(S): 20, 92, 99

COMMENTS: * The facility should determine the extent of any leakage to surrounding soil from the drums that were stored here. Since there is no dike to contain spills on the concrete floor and prevent product or waste from draining to the outside soil, samples should be taken along the outside edge of the storage area to determine if MEK was released to the ground during any of the processes which occurred here. If confirmatory sampling reveals that hazardous constituents are present in the surrounding media, then further investigation of the unit is warranted.

SWMU DATA SHEET

SWMU NUMBER: 5

PHOTOGRAPH NUMBER: 5.1, 5.2, 5.3, 5.4, 5.5

NAME: Wheelabrator® Dust Collector

TYPE OF UNIT: Baghouse and Drum Storage Area

PERIOD OF OPERATION: 1987 to 1992

PHYSICAL DESCRIPTION AND CONDITION: Metal to be coated was sandblasted using a machine called a Wheelabrator® which is located along the eastern wall of the main facility building, near the north entrance. The materials, which only required finishing, entered the main facility building from the north side for sandblasting before moving on to the coating/painting area. Pieces of steel requiring cutting or welding beforehand, entered the building through the south drive-through entrance before being brought to the north side of the building for finishing. The Wheelabrator® removed millscale from the steel materials to provide a smooth finish for coating. Steel shot and grit were fed into eight wheels that spun and delivered abrasives to the steel material.

Emissions from the Wheelabrator® were vented to this baghouse. The baghouse is located outside of the main building along the eastern wall, approximately 50 feet north of the north drive-through. The baghouse dust collector, which is approximately 30 feet high, funnels residual dust from the Wheelabrator® into empty barrels on a concrete pad below it. The collection area is less than ten feet from the drainage ditch.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: The Wheelabrator® baghouse collected residual millscale material from the sandblasting process. The millscale and grit/shot residue was collected in 55-gallon drums and sold as scrap. Dura-Bond estimated that it collected approximately 12 to 15 drums - or approximately 12 tons of this scrap per year. Twenty-six 55-gallon drums labeled as "shot blast" were clustered around the Wheelabrator® Dust Collector at the time of the VSI. The tops of these drums were covered with plastic sheeting and sealed with clear tape. One drum was uncovered beneath the dust dispenser, waiting to be filled.

RELEASE PATHWAYS: Air (M) Surface Water (H) Soil (H) Ground Water (H) Subsurface Gas (L)

HISTORY AND/OR EVIDENCE OF RELEASE(S): There was a blackish clay material, which appeared to be shot blast dust, on the ground and concrete pad surrounding the dust collector and drum area during the VSI. Chrome steel was used in the Wheelabrator® in the form of wear plates which may have released chrome with the residue. Dura-Bond has since been requested to have its shot blast dust residue analyzed to determine whether or not it is hazardous before it can be sent out for recycling. Samples of the shot blast dust taken in June 1992 revealed 510 ppm chromium, 60 ppm lead, 40 ppm arsenic, 18 ppm barium, and 12 ppm silver (Reference 106). The October 1990 FDER inspection report noted that the drums which had been placed under the baghouse unit were overflowing and that there was a rust colored dust on the ground next to the unit, as seen in photographs 5.4 and 5.5. At the time of the VSI, there were visible amounts of Wheelabrator® dust on the soil surface along the outdoor eastern side of the main building.

RECOMMENDATIONS: No Further Action ( )
Confirmatory Sampling (*)
RFI Necessary ( )

REFERENCE(S): 20, 27, 22, 25, 57, 100, 101

COMMENTS: * The facility should determine the extent of any contamination from the dust that has fallen to the ground surface in this area. If confirmatory sampling reveals that hazardous constituents are present in the surrounding media, then further investigation of the unit is warranted.

SWMU DATA SHEET

SWMU NUMBER: 6 **PHOTOGRAPH NUMBER:** 6.1

NAME: Waste Oil Tank

TYPE OF UNIT: Underground Storage Tank

PERIOD OF OPERATION: Unknown until 1989

PHYSICAL DESCRIPTION AND CONDITION: The former underground waste oil tank was located in the southeast corner of the property, between the two empty storage buildings. City of Jacksonville records show that the tank's capacity was approximately 550 gallons. However, Mr. Norris estimated that the tank's capacity was only approximately 250 gallons. There is no file information available indicating the source and specific content of the waste oil. According to Mr. Norris, Dura-Bond never used either of the two storage buildings. The most eastern of the two formerly housed Florida Steel's erection equipment. The tank was located closer to the western building. The area between the two buildings now contains a scrap tire pile along with some scrap fencing.

According to a July 1989 FDER Pollutant Storage Tank System Inspection Report, the waste oil tank was one of the four tanks that were noted as abandoned at this site. In July 1991, Dura-Bond notified the City of Jacksonville of the prior removal of several tanks, including tank #3 which, according to Figure II-8 on page II-33, matches the location of the underground waste oil tank as pointed out during the VSI. The excavation and removal of the tank was conducted by Bill Johns Waste Oil Service of Jacksonville in July 1989. In a proposal submitted to Dura-Bond, Bill Johns proposed to fill the excavation area with available soil.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: According to representatives of Dura-Bond, the tank stored waste oil under a previous owner. No information was provided concerning the specific management of any other wastes or hazardous constituents.

RELEASE PATHWAYS: Air (L) Surface Water (M) Soil (H)
Ground Water (H) Subsurface Gas (M)

HISTORY AND/OR EVIDENCE OF RELEASE(S): There is no information available from the facility or the file materials regarding the history of the tank including former uses, its condition, any past releases, or evidence of staining around the fill or vent ports. Dura-Bond representatives stated that the tank stored waste oil under a previous owner.

On June 21, 1992, a representative from Missimer & Associates detected unfiltered organic vapor analyzer (OVA) levels ranging from 10 ppm to 50 ppm and filtered levels ranging from 6 ppm to 45 ppm in soil in this vicinity (References 99, 105). It is unclear whether these readings resulted from residual waste oil or other organic material in the soil.

RECOMMENDATIONS: No Further Action ( )
Confirmatory Sampling (*)
RFI Necessary ( )

REFERENCE(S): 99, 100

COMMENTS: * Due to the limited amount of information for this unit from both the facility and the available file material, and the removal of the tank prior to UST regulations, confirmatory sampling of the surrounding media is warranted.

SWMU DATA SHEET

SWMU NUMBER: 7 **PHOTOGRAPH NUMBER:** 7.1, 7.2, 7.3, 7.4

NAME: Ramp Area

TYPE OF UNIT: Drum Storage Area and Unloading Area

PERIOD OF OPERATION: Unknown to 1992

PHYSICAL DESCRIPTION AND CONDITION: The ramp area is located adjacent to the south side of the north drive-through. It consists of a concrete pad (measuring 10 feet by 30 feet), with a short low-pitched ramp running from the pad to the soil. A corrugated metal equipment storage shed is located adjacent to the south side of the pad and the east side of the main facility building. The area encompassing the pad, ramp and surrounding soil area is enclosed by a chain link fence. At the time of the VSI, a dumpster was also located where the fence meets the north drive-through. Any surface water runoff would likely drain to the Drainage Ditch (SWMU 19) which is located approximately 15 feet to the east.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: At the time of the VSI, there were two 55-gallon drums being stored on the concrete pad, against the wall of the main building. One was labeled as waste oil and the other was labeled as kerosene. In addition, there were five automotive batteries and several machinery parts being stored on the concrete pad. The October 1990 FDER inspection report noted that oil and other substances appeared to have been discharged to the ground in this area, as seen in photograph 7.4 in Appendix C.

RELEASE PATHWAYS: Air (L) Surface Water (L) Soil (L)
Ground Water (L) Subsurface Gas (U)

HISTORY AND/OR EVIDENCE OF RELEASE(S): The soil surrounding the concrete pad lacked vegetation. However, the cause of this is unknown and may be due to stress inflicted by foot and machinery traffic in this vicinity. The October 1990 FDER inspection report noted that oil and other substances appeared to have been discharged to the ground in this area.

SWMU DATA SHEET

RECOMMENDATIONS: No Further Action ( )
Confirmatory Sampling (*)
RFI Necessary ( )

REFERENCE(S): 100

COMMENTS: * The facility should determine the extent of any releases that may have occurred in this area. If confirmatory sampling reveals that hazardous constituents are present in the surrounding media, then further investigation of the unit is warranted.

SWMU NUMBER: 8 **PHOTOGRAPH NUMBER:** 8.1, 8.2, 8.3, 8.4

NAME: Sandblast Residue Fill Area

TYPE OF UNIT: Disposal Area

PERIOD OF OPERATION: 1987 to 1992

PHYSICAL DESCRIPTION AND CONDITION: The fill area is located between the warehouse in the northeast corner of the facility and the eastern side of the main facility building. It extends between these two buildings, to the north and south of the Wheelabrator® Dust Collector (SWMU 5). According to the FDER hazardous waste inspection report, sandblast grit and millscale residue is used as fill material in this area. There is noticeably darker soil throughout this area. Parts of this area lack vegetation where dust from the sandblaster has been applied to the ground. The fill area is immediately adjacent to the Drainage Ditch (SWMU 19). During the FDER October 1990 hazardous waste inspection, several mounds of dark gray residue were noted along the north warehouse wall to the east of the main facility building, as seen in FDER photographs 8.3 and 8.4 in Appendix C.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: According to Mr. Norris and Mr. Elrod, residue from the outside sandblaster, which is located near the western edge of the property, was used as fill in the area near the Wheelabrator® Dust Collector (SWMU 5). According to Mr. Norris, the residue contained millscale and sand. It was graded as it accumulated. During the VSI, "Black Beauty" was observed on the ground surrounding the sandblast area. Black Beauty™ is a by-product of the combustion of coal which is processed into an abrasive product. It typically is composed of fused ferro-alumino-silicate which is formed when molten slag is quenched in cold water. The end result is a course non-crystalline black glass. Black Beauty™ contains several hazardous constituents including antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, selenium, silver, thallium, vanadium, and zinc. There is concern that Black Beauty™ could enter environmental media through runoff to surface water or leaching to ground water.

RELEASE PATHWAYS: Air (L) Surface Water (H) Soil (H) Ground Water (H) Subsurface Gas (U)

HISTORY AND/OR EVIDENCE OF RELEASE(S): There is noticeably darker soil throughout this area. Parts of this area lack vegetation where dust from the sandblaster has been applied to the ground. Because of the fill area's proximity to the drainage ditch, the potential for surface water runoff into the ditch and to potential receptors is high.

RECOMMENDATIONS:
No Further Action ( )
Confirmatory Sampling (*)
RFI Necessary ( )

REFERENCE(S): 20, 100

COMMENTS: * The facility should determine the extent of any contamination that may have occurred in this area as a result of residue in contact with the ground surface. If confirmatory sampling reveals that hazardous constituents are present in the surrounding media, then further investigation of the unit is warranted.

SWMU DATA SHEET

SWMU NUMBER: 9 **PHOTOGRAPH NUMBER:** 9.1, 9.2, 9.4, 9.5, 9.6

NAME: Historical Outside Storage Area

TYPE OF UNIT: Drum Storage Area

PERIOD OF OPERATION: 1987 to 1992

PHYSICAL DESCRIPTION AND CONDITION: This storage area is located immediately south of the north drive-through at the western edge of the main facility building. It consists of the concrete floor of the main building. The edge of the concrete is approximately 18 inches above the outside ground level in this area. The area adjacent to the concrete pad is now used to park site machinery. The October 1990 FDER inspection report noted that there were approximately fifty seven 55-gallon drums accumulating inside and outside of the main facility building. Dura-Bond employees were unable to identify the contents of most of the drums. Many of the drums were open and some were leaking or overflowing. The surrounding soil was stained, as can be seen in FDER photographs 9.4 and 9.5 in Appendix C.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: During an FDER hazardous waste inspection in 1990, it was noted that drums were stored on the concrete ledge and on the ground below it. No indication was made regarding the contents of the drums. However, the storage area is no longer used to store product or waste materials. Mr. Norris and Mr. Elrod said that no determination was ever made during site operations of whether the drums being brought to this area for storage contained hazardous waste.

RELEASE PATHWAYS: Air (L) Surface Water (M) Soil (M)
Ground Water (M) Subsurface Gas (U)

HISTORY AND/OR EVIDENCE OF RELEASE(S): Many of the drums which FDER officials observed accumulating in the area during their 1990 inspection were open. Some of them were leaking or overflowing, and the surrounding soil was stained.

SWMU DATA SHEET

RECOMMENDATIONS:	No Further Action ( ) Confirmatory Sampling (*) RFI Necessary ( )
REFERENCE(S):	100
COMMENTS:	* The facility should determine the extent of any leakage from the drums that were stored in this area. If confirmatory sampling reveals that hazardous constituents are present in the surrounding media, then further investigation of the unit is warranted.

SWMU NUMBER: 10 **PHOTOGRAPH NUMBER:** 10.1, 10.2, 10.3 10.4, 10.5

NAME: Blue Shed

TYPE OF UNIT: Drum Storage Area

PERIOD OF OPERATION: 1987 to 1992

PHYSICAL DESCRIPTION AND CONDITION: The shed was removed on March 6, 1992 by Balfour Beatty workers during the construction of the large concrete slab which now covers the area. The shed formerly stored paint.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: There is no information available from the facility or the available file material that indicates what type of wastes have been associated with this shed but FDER photographs indicate that this waste may have been paint or epoxy. The area on which the shed stood was graded and is now covered by a concrete pad. However, this shed was noted in the October 1990 FDER inspection; according to the FDER report, there were thirteen 55-gallon drums adjacent to the paint shed along with several five-gallon and one-gallon containers. Many of these drums were open at the time, and only a few were empty. The smaller containers were stacked two or three containers high (see FDER photographs 10.2, 10.3, 10.4 and 10.5 in Appendix C). The report stated that facility personnel could not identify the contents of the majority of the containers. Any spilling that occurred in the area was minor. Because of the viscosity of the materials assumed to be stored in this unit, any spilled materials may have remained on the ground surface and not migrated to the surrounding media.

RELEASE PATHWAYS: Air (L) Surface Water (L) Soil (L) Ground Water (L) Subsurface Gas (U)

HISTORY AND/OR EVIDENCE OF RELEASE(S): No evidence of unpermitted releases was identified in the available file material or observed during the VSI.

SWMU DATA SHEET

RECOMMENDATIONS:	No Further Action (X) Confirmatory Sampling ( ) RFI Necessary ( )
REFERENCE(S):	20, 100
COMMENTS:	None.

SWMU DATA SHEET

SWMU NUMBER: 11 **PHOTOGRAPH NUMBER:** see 10.1, 11.1, 11.2, 11.3

NAME: Sheet Metal Building

TYPE OF UNIT: Drum Storage Area

PERIOD OF OPERATION: 1987 to 1992

PHYSICAL DESCRIPTION AND CONDITION: The sheet metal building is an old paint shed that is located approximately 15 feet west of the edge of the concrete pad which Balfour Beatty is installing on the western side of the main facility building. It is approximately 10 feet square and 10 feet high and is constructed of corrugated sheet metal. According to Mr. Norris, the shed was originally located closer to the western fence line when Dura-Bond first began operations at the property. There were three dented 55-gallon drums approximately 10 to 20 feet south of the shed at the time of the VSI.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: The shed was noted in the October 1990 FDER inspection. According to the report, there were many containers inside the paint shed. The report stated that some of these drums appeared to contain fiberglass resin. They were stacked two or three containers high, as seen in FDER photographs 11.1, 11.2, 11.3 in Appendix C.

RELEASE PATHWAYS: Air (L) Surface Water (L) Soil (L) Ground Water (L) Subsurface Gas (U)

HISTORY AND/OR EVIDENCE OF RELEASE(S): No evidence of unpermitted releases was identified in the available file material or observed during the VSI.

SWMU DATA SHEET

RECOMMENDATIONS:	No Further Action (X) Confirmatory Sampling ( ) RFI Necessary ( )
REFERENCE(S):	20, 100
COMMENTS:	None.

SWMU NUMBER: 12 **PHOTOGRAPH NUMBER:** 12.1, 12.2, 12.3, 12.4, 12.5, 12.6

NAME: Paint Cans Excavation Area

TYPE OF UNIT: Landfill

PERIOD OF OPERATION: Unknown (possibly 1970s) to 1992

PHYSICAL DESCRIPTION AND CONDITION: This excavation area is located on the south side of the property adjacent to the south Drainage Ditch (SWMU 19). It is located at the top of the ledge overlooking the Highway Avenue drainage ditch and lies approximately 15 feet above the bottom of the Highway Avenue ditch. The excavation pit is located approximately five feet east of the westernmost south driveway. It measures approximately 10 feet deep and 15 feet in diameter. A narrow ravine runs from the pit to the base of the Highway Avenue ditch. According to Dura-Bond officials, Florida Steel or possibly Bushnell used to maintain a paint shed in this area. It is also near an area which historically experienced soil washouts.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: According to Dura-Bond officials, at the time that this unit was discovered, some of the five-gallon cans had ruptured and the soil around the paint cans was saturated with paint. The paint was recognized as red lead-based primer paint which Florida Steel once used on some of its Department of Transportation projects. Mr. Elrod stated that 3.5 to 4 gallons of product were recovered from this area. Mr. Oliveros stated that the surrounding soils were contaminated with VOCs based on visual observations, odor, and high OVA readings. Within 24 hours of discovery of this unit, Missimer consultants took samples of the saturated soil and the surrounding cans. Samples were also taken of the runoff in contact with these wastes. The waste paint was containerized and stored onsite in the Paint Can Excavation Drum Storage Area (SWMU 20). Sorbents were also applied to contain any remaining spill material. Approximately 50 drums were filled with potentially contaminated soil from the excavation pit and stored at the Paint Can Excavation Drum Storage Area. Additional excavation materials are being stored in the Covered and Uncovered Soil Piles (SWMUs 3 and 4).

RELEASE PATHWAYS: Air (L) Surface Water (H) Soil (H) Ground Water (H) Subsurface Gas (H)

HISTORY AND/OR EVIDENCE OF RELEASE(S): According to Mr. Elrod, the paint cans were unearthed on April 8, 1992. On April 9, 1992, all of the paint cans were containerized. By June 11, 1992, the Covered and Uncovered Soil Piles (SWMUs 13 and 14, respectively) had been created and the storage drums in the Paint Can Excavation Drum Storage Area (SWMU 20) had been filled. Task Environmental of Tampa, Florida conducted the paint can removal.

Sampling results of the paint sludge using a flame ionization detector indicated contamination at the following levels: 270,000 to 540,000 ppm lead; 500,000 to 680,000 ppb ethylbenzene; 2,900,000 to 3,300,000 ppb total xylenes; 1,800,000 ppb toluene; 760,000 ppb MEK; 24 ppm barium; and 53 ppm selenium. Sampling results for the standing water in this area indicate contamination at the following levels: 12 ppm lead; 350 ppm chromium; 8,000,000 ppb ethylbenzene; 145,837 ppm total petroleum hydrocarbons; and 22,000,000 ppb total xylenes. Sampling results for the surrounding soil showed contamination at the following levels: 2,000 ppm lead; 120 ppm barium; 72 ppm chromium; 22,000 ppb MEK; 61,000 ppb acetone; 390,000 ppb ethylbenzene; 49,000 ppb toluene; and 220,000 ppb total xylenes (References 99, 105). Sampling results are shown in Table III-1.

In addition, due to the presence of a seepage face along the northern edge of the Highway Avenue drainage ditch, shallow ground water beneath the facility discharges to the ditch, according to Dura-Bond's Closure Permit Application (Reference 92). Given the proximity of the excavated paint cans to the northern edge of the ditch, there is a high likelihood that contamination from the paint cans may have entered the ditch.

RECOMMENDATIONS: No Further Action ( )
Confirmatory Sampling ( )
RFI Necessary (*)

REFERENCE(S): 92, 100, 101

Table III-1

Sampling Results
from Paint Cans Excavation Area (SWMU 12)

Sampling Results from Paint Cans Excavation Area
(SWMU 12) (Reference 99)

AnalyticalTechnologies,Inc. 11 East Olive Road Pensacola, Florida 32514 (904) 474-1001

MISSIMER & ASSOCIATES INC
8130 BAYMEADOWS WAY WEST
SUITE 104
JACKSONVILLE FL 32256-0000

Lab I.D.#: 92-2914A
Order Number: P56821
Received Date: 04/10/92
Client: 13042
Sampled By: L.W.P.
Sample Date: 04/08/92
Sample Time: PM

Project Number: JE1-560
Project Name: DURABOND
Sample Site: DURABOND STEEL-JAX
Sample Type: SLUDGE

N/S = Not Submitted

R E S U L T S

reported on the following page(s)

Comments: PPM = Parts Per Million, mg/kg on a dry basis. BDL = Below Detection Limits. Method Ref: SW-846, 3rd Edition, 11/86. Metals done on an as is basis. *Matrix Interference. +Diluted due to overcalibration.

Approved By : [signature]

AnalyticalTechnologies,Inc. 11 East Olive Road Pensacola, Florida 32514 (904) 474-1001

Client: MISSIMER & ASSOCIATES INC

Lab I.D.#: 92-2914A-1
Received Date: 04/10/92
Sampled By: L.W.P.

Project Number: JE1-560
Project Name: DURABOND
Sample Site: DURABOND STEEL-JAX
Sample Type: SLUDGE

Sample ID.: C-1 Sample Date: 04/08/92 Time: PM

RCRA/METALS/S RCRA METALS (SOIL)

Parameter	Units	Result	Detection Limit
SILVER	PPM	BDL	5*
ARSENIC	PPM	BDL	30*
BARIUM	PPM	24	5*
CADMIUM	PPM	BDL	2.5*
CHROMIUM	PPM	5	5*
MERCURY	PPM	0.6	0.1
LEAD	PPM	540000	2000+
SELENIUM	PPM	53	50*

AnalyticalTechnologies,Inc. 11 East Olive Road Pensacola, Florida 32514 (904) 474-1001

Client: MISSIMER & ASSOCIATES INC
Lab I.D.#: 92-2914A-2
Received Date: 04/10/92
Sampled By: L.W.P.

Project Number: JE1-560
Project Name: DURABOND
Sample Site: DURABOND STEEL-JAX
Sample Type: SLUDGE

Sample ID.: C-2 Sample Date: 04/08/92 Time: PM

RCRA/METALS/S RCRA METALS (SOIL)

Parameter	Units	Result	Detection Limit
SILVER	PPM	BDL	5*
ARSENIC	PPM	BDL	30*
BARIUM	PPM	42	5*
CADMIUM	PPM	BDL	2.5*
CHROMIUM	PPM	36	5*
MERCURY	PPM	0.4	0.1
LEAD	PPM	270000	2000+
SELENIUM	PPM	BDL	50*

Table III-1 (contined)

AnalyticalTechnologies,Inc. 11 East Olive Road Pensacola, Florida 32514 (904) 474-1001

Client: MISSIMER & ASSOCIATES INC
Lab I.D.#: 92-2914A-1
Received Date: 04/10/92
Sampled By: L.W.P.

Project Number: JE1-560
Project Name: DURABOND
Sample Site: DURABOND STEEL-JAX
Sample Type: SLUDGE

Sample ID.: C-1 Sample Date: 04/08/92 Time: PM

VOL/8240 VOLATILE METHOD 8240

Parameter	Units	Result	Detection Limit
ACETONE	PPB	BDL	1100000
ACROLEIN	PPB	BDL	11000000
ACRYLONITRILE	PPB	BDL	11000000
BENZENE	PPB	BDL	110000
BROMODICHLOROMETHANE	PPB	BDL	110000
BROMOFORM	PPB	BDL	220000
BROMOMETHANE	PPB	BDL	110000
2-BUTANONE (MEK)	PPB	BDL	330000
CARBON DISULFIDE	PPB	BDL	110000
CARBON TETRACHLORIDE	PPB	BDL	220000
CHLOROBENZENE	PPB	BDL	110000
CHLOROETHANE	PPB	BDL	110000
2-CHLOROETHYL VINYL ETHER	PPB	BDL	550000
CHLOROFORM	PPB	BDL	220000
CHLOROMETHANE	PPB	BDL	220000
CHLORODIBROMOMETHANE	PPB	BDL	550000
DIBROMOMETHANE	PPB	BDL	550000
DICHLORODIFLUOROMETHANE	PPB	BDL	550000
1,1-DICHLOROETHANE	PPB	BDL	110000
1,2-DICHLOROETHANE	PPB	BDL	220000
1,1-DICHLOROETHENE	PPB	BDL	110000
TOTAL 1,2-DICHLOROETHYLENE	PPB	BDL	550000
1,2-DICHLOROPROPANE	PPB	BDL	220000
CIS-1,3-DICHLOROPROPENE	PPB	BDL	110000
TRANS-1,3-DICHLOROPROPENE	PPB	BDL	110000
1,4-DICHLORO-2-BUTENE	PPB	BDL	550000
ETHANOL	PPB	BDL	5500000
ETHYLBENZENE	PPB	6800000	110000
ETHYL METHACRYLATE	PPB	BDL	550000
2-HEXANONE	PPB	BDL	330000
IODOMETHANE	PPB	BDL	550000
METHYLENE CHLORIDE	PPB	BDL	330000
4-METHYL-2-PENTANONE	PPB	BDL	330000
STYRENE	PPB	BDL	220000
1,1,2,2-TETRACHLOROETHANE	PPB	BDL	220000

Sample ID.: C-1 Test Parameters continued on next page

Table III-1 (contined)

AnalyticalTechnologies,Inc. 11 East Olive Road Pensacola, Florida 32514 (904) 474-1001

Client: MISSIMER & ASSOCIATES INC
Lab I.D.#: 92-2914A-1
Received Date: 04/10/92
Sampled By: L.W.P.

Project Number: JE1-560
Project Name: DURABOND
Sample Site: DURABOND STEEL-JAX
Sample Type: SLUDGE

Sample ID: C-1 Sample Date: 04/08/92 Time: PM

VOL/8240 VOLATILE METHOD 8240 continued

Parameter	Units	Result	Detection Limit
TETRACHLOROETHENE	PPB	BDL	110000
TOLUENE	PPB	BDL	550000
1,1,1-TRICHLOROETHANE	PPB	BDL	550000
1,1,2-TRICHLOROETHANE	PPB	BDL	220000
TRICHLOROETHENE	PPB	BDL	110000
TRICHLOROFLUOROMETHANE	PPB	BDL	110000
1,2,3-TRICHLOROPROPANE	PPB	BDL	550000
VINYL ACETATE	PPB	BDL	220000
VINYL CHLORIDE	PPB	BDL	110000
TOTAL XYLENES	PPB	2900000	440000
BROMOFLUOROBENZENE *SURR*	% REC	104	
1,2-DICHLOROETHANE D4 *SURR*	% REC	100	
TOLUENE D8 *SURR*	% REC	102	

AnalyticalTechnologies,Inc. 11 East Olive Road Pensacola, Florida 32514 (904) 474-1001

Client: MISSIMER & ASSOCIATES INC
Lab I.D.#: 92-2914A-2
Received Date: 04/10/92
Project Number: JE1-560
Sampled By: L.W.P.
Project Name: DURABOND
Sample Site: DURABOND STEEL-JAX
Sample Type: SLUDGE

Sample ID.: C-2 Sample Date: 04/08/92 Time: PM

VOL/8240 VOLATILE METHOD 8240

Parameter	Units	Result	Detection Limit
ACETONE	PPB	BDL	130000
ACROLEIN	PPB	BDL	1300000
ACRYLONITRILE	PPB	BDL	1300000
BENZENE	PPB	BDL	13000
BROMODICHLOROMETHANE	PPB	BDL	13000
BROMOFORM	PPB	BDL	26000
BROMOMETHANE	PPB	BDL	13000
2-BUTANONE (MEK)	PPB	760000	38000
CARBON DISULFIDE	PPB	BDL	13000
CARBON TETRACHLORIDE	PPB	BDL	26000
CHLOROBENZENE	PPB	BDL	13000
CHLOROETHANE	PPB	BDL	13000
2-CHLOROETHYL VINYL ETHER	PPB	BDL	64000
CHLOROFORM	PPB	BDL	26000
CHLOROMETHANE	PPB	BDL	26000
CHLORODIBROMOMETHANE	PPB	BDL	64000
DIBROMOMETHANE	PPB	BDL	64000
DICHLORODIFLUOROMETHANE	PPB	BDL	64000
1,1-DICHLOROETHANE	PPB	BDL	13000
1,2-DICHLOROETHANE	PPB	BDL	26000
1,1-DICHLOROETHENE	PPB	BDL	13000
TOTAL 1,2-DICHLOROETHYLENE	PPB	BDL	64000
1,2-DICHLOROPROPANE	PPB	BDL	26000
CIS-1,3-DICHLOROPROPENE	PPB	BDL	13000
TRANS-1,3-DICHLOROPROPENE	PPB	BDL	13000
1,4-DICHLORO-2-BUTENE	PPB	BDL	64000
ETHANOL	PPB	BDL	640000
ETHYLBENZENE	PPB	500000	13000
ETHYL METHACRYLATE	PPB	BDL	64000
2-HEXANONE	PPB	BDL	38000
IODOMETHANE	PPB	BDL	64000
METHYLENE CHLORIDE	PPB	BDL	38000
4-METHYL-2-PENTANONE	PPB	100000	38000
STYRENE	PPB	BDL	26000
1,1,2,2-TETRACHLOROETHANE	PPB	BDL	26000

Sample ID.: C-2 Test Parameters continued on next page

Table III-1 (contined)

AnalyticalTechnologies,Inc. 11 East Olive Road Pensacola, Florida 32514 (904) 474-1001

Client: MISSIMER & ASSOCIATES INC

Lab I.D.#: 92-2914A-2
Received Date: 04/10/92
Sampled By: L.W.P.

Project Number: JE1-560
Project Name: DURABOND
Sample Site: DURABOND STEEL-JAX
Sample Type: SLUDGE

Sample ID.: C-2 Sample Date: 04/08/92 Time: PM

/OL/8240 VOLATILE METHOD 8240 continued

Parameter	Units	Result	Detection Limit
TETRACHLOROETHENE	PPB	BDL	13000
TOLUENE	PPB	1800000	64000
1,1,1-TRICHLOROETHANE	PPB	BDL	64000
1,1,2-TRICHLOROETHANE	PPB	BDL	26000
TRICHLOROETHENE	PPB	BDL	13000
TRICHLOROFLUOROMETHANE	PPB	BDL	13000
1,2,3-TRICHLOROPROPANE	PPB	BDL	64000
VINYL ACETATE	PPB	BDL	26000
VINYL CHLORIDE	PPB	BDL	13000
TOTAL XYLENES	PPB	3300000	51000
BROMOFLUOROBENZENE *SURR*	% REC	108	
1,2-DICHLOROETHANE D4 *SURR*	% REC	100	
TOLUENE D8 *SURR*	% REC	99	

end of repor

AnalyticalTechnologies,Inc. 11 East Olive Road Pensaçola, Florida 32514 (904) 474-1001

Client: MISSIMER & ASSOCIATES INC
Lab I.D.#: 92-2914B-1
Received Date: 04/10/92
Project Number: JE1-560
Sampled By: L.W.P.
Project Name: DURABOND
Sample Site: DURABOND STEEL-JAX
Sample Type: SLUDGE

Sample ID.: LIQUID   Sample Date: 04/08/92   Time: 1730

RCRA/METALS/S   RCRA METALS   (SOIL)

Parameter	Units	Result	Detection Limit
SILVER	PPM	0.9	0.1
ARSENIC	PPM	BDL	4*
BARIUM	PPM	BDL	0.6*
CADMIUM	PPM	0.08	0.06
CHROMIUM	PPM	350	0.5+
MERCURY	PPM	1.0	0.1
LEAD	PPM	12	3*
SELENIUM	PPM	BDL	6*

AnalyticalTechnologies,Inc. 11 East Olive Road Pensacola, Florida 32514 (904) 474-1001

Client: MISSIMER & ASSOCIATES INC

Lab I.D.#: 92-2914B-1
Received Date: 04/10/92
Sampled By: L.W.P.

Project Number: JE1-560
Project Name: DURABOND
Sample Site: DURABOND STEEL-JAX
Sample Type: SLUDGE

Sample ID.: LIQUID Sample Date: 04/08/92 Time: 1730

/OL/8240 VOLATILE METHOD 8240

Parameter	Units	Result	Detection Limit
ACETONE	PPB	BDL	10000000
ACROLEIN	PPB	BDL	100000000
ACRYLONITRILE	PPB	BDL	100000000
BENZENE	PPB	BDL	1000000
BROMODICHLOROMETHANE	PPB	BDL	1000000
BROMOFORM	PPB	BDL	2000000
BROMOMETHANE	PPB	BDL	1000000
2-BUTANONE (MEK)	PPB	BDL	3000000
CARBON DISULFIDE	PPB	BDL	1000000
CARBON TETRACHLORIDE	PPB	BDL	2000000
CHLOROBENZENE	PPB	BDL	1000000
CHLOROETHANE	PPB	BDL	1000000
2-CHLOROETHYL VINYL ETHER	PPB	BDL	5000000
CHLOROFORM	PPB	BDL	2000000
CHLOROMETHANE	PPB	BDL	2000000
CHLORODIBROMOMETHANE	PPB	BDL	5000000
DIBROMOMETHANE	PPB	BDL	5000000
DICHLORODIFLUOROMETHANE	PPB	BDL	5000000
1,1-DICHLOROETHANE	PPB	BDL	1000000
1,2-DICHLOROETHANE	PPB	BDL	2000000
1,1-DICHLOROETHENE	PPB	BDL	1000000
TOTAL 1,2-DICHLOROETHYLENE	PPB	BDL	5000000
1,2-DICHLOROPROPANE	PPB	BDL	2000000
CIS-1,3-DICHLOROPROPENE	PPB	BDL	1000000
TRANS-1,3-DICHLOROPROPENE	PPB	BDL	1000000
1,4-DICHLORO-2-BUTENE	PPB	BDL	5000000
ETHANOL	PPB	BDL	50000000
ETHYLBENZENE	PPB	8000000	1000000
ETHYL METHACRYLATE	PPB	BDL	5000000
2-HEXANONE	PPB	BDL	3000000
IODOMETHANE	PPB	BDL	5000000
METHYLENE CHLORIDE	PPB	BDL	3000000
4-METHYL-2-PENTANONE	PPB	BDL	3000000
STYRENE	PPB	BDL	2000000
1,1,2,2-TETRACHLOROETHANE	PPB	BDL	2000000

Sample ID.: LIQUID Test Parameters continued on next page

Table III-1 (contined)

AnalyticalTechnologies,Inc. 11 East Olive Road Pensacola, Florida 32514 (904) 474-1001

Client: MISSIMER & ASSOCIATES INC
Lab I.D.#: 92-2914C-1
Received Date: 04/10/92
Sampled By: L.W.P.

Project Number: JE1-560
Project Name: DURABOND
Sample Site: DURABOND STEEL-JAX
Sample Type: SOIL

Sample ID.: S-1 Sample Date: 04/08/92 Time: 1810

/OL/8240 VOLATILE METHOD 8240 continued

Parameter	Units	Result	Detection Limit
TETRACHLOROETHENE	PPB	BDL	1200
TOLUENE	PPB	49000	6100
1,1,1-TRICHLOROETHANE	PPB	BDL	6100
1,1,2-TRICHLOROETHANE	PPB	BDL	2400
TRICHLOROETHENE	PPB	BDL	1200
TRICHLOROFLUOROMETHANE	PPB	BDL	1200
1,2,3-TRICHLOROPROPANE	PPB	BDL	6100
VINYL ACETATE	PPB	BDL	2400
VINYL CHLORIDE	PPB	BDL	1200
TOTAL XYLENES	PPB	220000	4900
BROMOFLUOROBENZENE *SURR*	% REC	110	
1,2-DICHLOROETHANE D4 *SURR*	% REC	97	
TOLUENE D8 *SURR*	% REC	101	

end of report

Table III-1 (contined)

AnalyticalTechnologies,Inc. 11 East Olive Road Pensacola, Florida 32514 (904) 474-1001

Client: MISSIMER & ASSOCIATES INC

Lab I.D.#: 92-2914D-1
Received Date: 04/10/92
Sampled By: L.W.P.

Project Number: JE1-560
Project Name: DURABOND
Sample Site: DURABOND STEEL-JAX
Sample Type: SLUDGE

Sample ID.: LIQUID Sample Date: 04/08/92 Time: 1730

TPH/GC/FID/S TPH/GC/FID/SOIL

Parameter	Units	Result	Detection Limit
TOTAL PETROLEUM HYDROCARBONS	PPM	145837	5.0
IDENTIFICATION MINERAL SPIRITS		145837	

end of repo

AnalyticalTechnologies,Inc. 11 East Olive Road Pensacola, Florida 32514 (904) 474-1001

Client: MISSIMER & ASSOCIATES INC

Lab I.D.#: 92-2914E-1
Received Date: 04/10/92
Sampled By: L.W.P.

Project Number: JE1-560
Project Name: DURABOND
Sample Site: DURABOND STEEL-JAX
Sample Type: SLUDGE

Sample ID.: C-1 Sample Date: 04/08/92 Time: PM

TCLP/METALS/PR TCLP METALS ANALYSIS

Parameter	Units	Result	Detection Limit
SILVER, TCLP	PPM	BDL	0.5
ARSENIC, TCLP	PPM	BDL	0.5
BARIUM, TCLP	PPM	BDL	10
CADMIUM, TCLP	PPM	BDL	0.1
CHROMIUM, TCLP	PPM	BDL	0.5
MERCURY, TCLP	PPM	BDL	0.002
LEAD, TCLP	PPM	1500	5+
SELENIUM, TCLP	PPM	BDL	0.1
SILVER, TCLP	% RECOVERY	80	
ARSENIC, TCLP	% RECOVERY	90	
BARIUM, TCLP	% RECOVERY	85	
CADMIUM, TCLP	% RECOVERY	90	
CHROMIUM, TCLP	% RECOVERY	80	
MERCURY, TCLP	% RECOVERY	100	
LEAD, TCLP	% RECOVERY	30000	
SELENIUM, TCLP	% RECOVERY	100	

end of report

COMMENTS:

* Dura-Bond indicated in its Closure Permit Application that Florida Steel used red lead-based primer paints in its operations. Mr. Oliveros also stated that Florida Steel used such paints on Department of Transportation related projects. According to Mr. Elrod, Florida Steel is paying for the cleanup of this area (Reference 100). Given this information and Mr. Elrod's and Mr. Oliveros' indications that the surrounding soil was contaminated with VOCs, further investigation as to the extent and magnitude of the contamination to the environmental media in this area is warranted.

SWMU NUMBER: 13 **PHOTOGRAPH NUMBER:** 13.1, 13.2, 13.3, 13.4, 13.5, 13.6

NAME: Covered Soil Pile

TYPE OF UNIT: Waste Pile

PERIOD OF OPERATION: 1992

PHYSICAL DESCRIPTION AND CONDITION: Preliminary segregation of the soil from the Paint Cans Excavation Area (SWMU 12) occurred in the southwest corner of the property. Soils with visual evidence of paint contamination, as well as paint cans, were drummed and stored in the Paint Can Excavation Drum Storage Area (SWMU 20); however, soil not containing visual signs of contamination but producing high OVA readings was placed in this unit (measuring 30 feet in diameter and approximately ten feet high). According to Mr. Elrod, the pile was lined underneath and covered with a double layer of sheet plastic (Visquene™). There was a dirt berm surrounding the pile at the time of the VSI. However, there is evidence of surface water runoff from the vicinity of this unit to a nearby Storm Water System (SWMU 18) drain.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: This unit manages soil from the Paint Cans Excavation Area (SWMU 12) which produced elevated OVA readings at the time of excavation. According to Mr. Elrod, preliminary indications suggest that this soil may contain ethylbenzene, xylene, and mineral spirits. Missimer and Associates collected samples for SW846 Method 8240 and RCRA metals analyses, but the results of these tests are not yet available.

RELEASE PATHWAYS: Air (M) Surface Water (H) Soil (M)
Ground Water (M) Subsurface Gas (L)

HISTORY AND/OR EVIDENCE OF RELEASE(S): There is evidence of surface water runoff from the vicinity of this unit to the Highway Avenue drainage ditch and a nearby Storm Water System (SWMU 18) drain. In addition, VSI team members detected a noticeable VOC odor near the covered soil pile. The pile is also adjacent to the Highway Avenue drainage ditch which serves as a receptor for surface water discharge from the facility.

In addition, due to the presence of a seepage face along the northern edge of the Highway Avenue drainage ditch, shallow ground water beneath the facility discharges to the ditch, according to Dura-Bond's Closure Permit Application (Reference 92). Given the proximity of the excavated paint cans to the northern edge of the ditch, there is a high likelihood that contamination from the paint cans may have entered the ditch.

RECOMMENDATIONS: No Further Action ( )
Confirmatory Sampling (*)
RFI Necessary ( )

REFERENCE(S): 100

COMMENTS: * The results of the soil sampling analyses from this pile are forthcoming. The facility should also determine the extent of any contamination to the surrounding media which may have resulted from any runoff or seepage from the pile. If confirmatory sampling reveals that hazardous constituents are present in the surrounding media, then further investigation of the unit is warranted.

SWMU NUMBER: 14 **PHOTOGRAPH NUMBER:** 14.1, 13.3

NAME: Uncovered Soil Pile

TYPE OF UNIT: Waste Pile

PERIOD OF OPERATION: 1992

PHYSICAL DESCRIPTION AND CONDITION: Preliminary segregation of the soil from the Paint Cans Excavation Area (SWMU 12) occurred in the southwest corner of the property. "Clean" soil (based on low OVA readings, as well as lack of visual evidence of contamination or organic odors) from the excavation area was placed in an unlined pile in the far southwest corner of the property. The pile is 15 to 20 feet in diameter and approximately 10 feet high. No cover or liner was placed on or beneath this pile. There is evidence of surface water runoff from the vicinity of this unit to a nearby Storm Water System (SWMU 18) drain.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: Missimer and Associates performed SW846 Method 8240 for volatiles and RCRA metals tests on the excavated material in this unit; however, the results of these analyses are not yet available.

RELEASE PATHWAYS: Air (L) Surface Water (H) Soil (M) Ground Water (M) Subsurface Gas (L)

HISTORY AND/OR EVIDENCE OF RELEASE(S): There is evidence of surface water runoff from the vicinity of this unit to a nearby Storm Water System (SWMU 18) drain. The pile is also adjacent to the Highway Avenue drainage ditch which serves as a receptor for surface water discharge for the facility.

In addition, due to the presence of a seepage face along the northern edge of the Highway Avenue drainage ditch, shallow ground water beneath the facility discharges to the ditch, according to Dura-Bond's Closure Permit Application (Reference 92). Given the proximity of the excavated paint cans to the northern edge of the ditch, there is a high likelihood that contamination from the paint cans may have entered the ditch.

SWMU DATA SHEET

RECOMMENDATIONS: No Further Action ( )
Confirmatory Sampling (*)
RFI Necessary ( )

REFERENCE(S): 100

COMMENTS: * The results of the soil sampling tests from this pile are forthcoming. The facility should determine the extent of any contamination to the surrounding media which may have resulted from any runoff or seepage from the pile. If confirmatory sampling reveals that hazardous constituents are present in the surrounding media, then further investigation of the unit is warranted.

SWMU NUMBER: 15 **PHOTOGRAPH NUMBER:** 15.1

NAME: Shot Blast Drum Storage Area

TYPE OF UNIT: Drum Storage Area

PERIOD OF OPERATION: 1987 to 1992

PHYSICAL DESCRIPTION AND CONDITION: This drum storage area is located adjacent to the Sandblast Area (SWMU 16), approximately 20 feet to the northwest of the outdoor sandblaster, on the western side of the main facility building. At the time of the VSI, there were twenty seven drums labeled "Shot Dust" arranged in this area. The drums were covered with lids and sealed with plastic and clear tape. These drums contained residual millscale and grit/shot dust from the Wheelabrator® Dust Collector (SWMU 5).

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: The Wheelabrator® baghouse collected residual millscale from the sandblasting process. The millscale and grit/shot residue were collected in 55-gallon drums and sold as scrap. Dura-Bond estimated that the facility produced approximately 12 to 15 drums - or approximately 12 tons of this scrap per year. Chrome steel was used in the Wheelabrator® in the form of wear plates which may have released chrome with the residue. Dura-Bond has since been requested to analyze its shot blast dust residue to determine whether or not it is hazardous before it can be sent out for recycling. Samples of the shot blast dust taken in June 1992 revealed 510 ppm chromium, 60 ppm lead, 40 ppm total arsenic, 18 ppm total barium, and 12 ppm total silver (Reference 106). TCLP analyses for silver, arsenic, chromium, and lead (the only TC constituents tested) were below regulatory levels.

RELEASE PATHWAYS: Air (L) Surface Water (L) Soil (L)
Ground Water (L) Subsurface Gas (L)

HISTORY AND/OR EVIDENCE OF RELEASE(S): No evidence of unpermitted releases from the drums was identified in the available file material or observed during the VSI.

SWMU DATA SHEET

RECOMMENDATIONS:	No Further Action (X) Confirmatory Sampling ( ) RFI Necessary ( )
REFERENCE(S):	100
COMMENTS:	None.

SWMU DATA SHEET

SWMU NUMBER: 16 **PHOTOGRAPH NUMBER:** 16.1, 16.2, 16.3, 16.4

NAME: Sandblast Area

TYPE OF UNIT: Process Area

PERIOD OF OPERATION: 1987 to 1992

PHYSICAL DESCRIPTION AND CONDITION: The outside sandblaster is located approximately 100 feet west of the main facility building. Twenty seven barrels labeled "Shot Dust" were clustered to the north of the sandblaster in the Shot Blast Drum Storage Area (SWMU 15) at the time of the VSI. There is evidence of a storm water outfall parallel to the midway point of the main facility building, near the Sandblast Area. This outfall is located on the Chatham Steel property to the west of Dura-Bond.

The sandblast pile was created from the residual sandblast material at the outdoor sandblaster. Sandblast residue that fell to the ground around the sandblaster was either graded in the vicinity of the machine, used for fill on the eastern side of the main facility building (SWMU 8), or placed in this pile northwest of the sandblaster. The pile is approximately ten feet high and 15 feet in diameter and is positioned on base soil. The residual material is a light gray color with darker particles interspersed.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: The area surrounding the outdoor sandblaster is one of two areas on the property which Mr. Norris identified as being fill areas for sandblast residue. According to Mr. Norris, the residue contained millscale and sand which was graded as it accumulated. During the VSI, Black Beauty™ was observed on the ground surrounding the sandblast area. Black Beauty™ is a by-product of the combustion of coal which is processed into an abrasive product. It typically is composed of fused ferro-alumino-silicate which is formed when molten slag is quenched in cold water. The end result is a coarse non-crystalline black glass. Black Beauty™ contains several hazardous constituents including antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, selenium, silver, thallium, vanadium, and zinc. There is concern that Black Beauty™ could enter environmental media through runoff to surface water or leaching to ground water.

SWMU DATA SHEET

RELEASE PATHWAYS: Air (L) Surface Water (H) Soil (H)
Ground Water (H) Subsurface Gas (L)

HISTORY AND/OR EVIDENCE OF RELEASE(S): The residue, which may contain Black Beauty™ from the sandblasting process, is graded as it accumulates in the area surrounding the sandblaster.

RECOMMENDATIONS: No Further Action ( )
Confirmatory Sampling (*)
RFI Necessary ( )

REFERENCE(S): 100, 101

COMMENTS: * It is unknown to what extent contamination may have occurred as a result of Black Beauty™ being used in the sandblasting process. If confirmatory sampling reveals that hazardous constituents are present in the surrounding media, then further investigation of the unit is warranted.

The results of the soil sampling tests from this pile are forthcoming. The facility should determine the extent of any contamination to the surrounding media which may have resulted from any runoff or seepage from the pile. If confirmatory sampling reveals that hazardous constituents are present in the surrounding media, then further investigation of the unit is warranted.

SWMU DATA SHEET

SWMU NUMBER: 17 **PHOTOGRAPH NUMBER:** 17.1, 17.2, 17.3

NAME: Construction Debris Pile

TYPE OF UNIT: Waste Pile

PERIOD OF OPERATION: 1992

PHYSICAL DESCRIPTION AND CONDITION: The debris pile is located along the western fence line, north of the Covered Soil Pile (SWMU 13), the Uncovered Soil Pile (SWMU 14), the Construction Debris/Soil Pile (SWMU 21), and the Paint Can Excavation Drum Storage Area (SWMU 20). According to Dura-Bond representatives, the soil in this pile was bulldozed from the area where Balfour Beatty has constructed a concrete pad and is planning to erect a painting building.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: There is no information available that indicates that any hazardous wastes or hazardous constituents may be associated with this soil pile. However, an old, empty 55-gallon drum was visible in the pile at the time of the VSI. The land that was graded and is now covered by the concrete pad contained the former Blue Shed (SWMU 10) which was noted in the October 1990 FDER inspection. Many drums of unspecified material were open at the time of that inspection, and only a few were empty. Many containers were also noted inside the paint shed. The report stated that some of these drums appeared to contain fiberglass resin.

During the VSI it was observed that the pile contained old, rusted, misshapen 55-gallon drums. Some of these may have come from the Blue Shed (SWMU 10) area. It also contained blocks of concrete, lumber, tires, scrap metal, and torn and crushed 55-gallon storage drums. No residuals were noted in the drums. A small blue aboveground storage tank is located to the south of the pile and is labeled as "Scrap."

RELEASE PATHWAYS: Air (L) Surface Water (L) Soil (L)
Ground Water (L) Subsurface Gas (L)

HISTORY AND/OR EVIDENCE OF RELEASE(S): No evidence of unpermitted releases was identified in the available file material or observed during the VSI.

RECOMMENDATIONS: No Further Action (X)
Confirmatory Sampling ( )
RFI Necessary ( )

REFERENCE(S): 100

COMMENTS: None.

SWMU NUMBER: 18 **PHOTOGRAPH NUMBER:** 18.1, 18.2, 18.3

NAME: Storm Water System

TYPE OF UNIT: Underground Pipes

PERIOD OF OPERATION: Unknown to 1992

PHYSICAL DESCRIPTION AND CONDITION: During the VSI, a storm water sewer drain was located between the Covered Soil Pile (SWMU 13), the Uncovered Soil Pile (SWMU 14), and the Construction Debris/ Soil Pile (SWMU 21) in the southwest corner of the property. There was evidence of surface water runoff to the drain from the Covered Soil Pile and the Uncovered Soil Pile. A second storm water drain is located approximately 30 feet south and 10 feet west of the Hazardous Materials/Waste Storage Area (SWMU 4). A third storm water drain is located on the east side of the main facility building near the western edge of the south parking lot. This storm water drain was clogged at the time of the VSI. There is evidence of a storm water outfall parallel to the midway point of the main facility building near the Construction Debris Pile (SWMU 17). The outfall is located on the Chatham Steel property to the west of Dura-Bond.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: No information was available from the facility or file materials regarding the possible release of wastes to the storm water system.

RELEASE PATHWAYS: Air (L) Surface Water (H) Soil (U)
Ground Water (U) Subsurface Gas (U)

HISTORY AND/OR EVIDENCE OF RELEASE(S): There was evidence of surface water runoff to the southwestern drain of this unit from the Covered Soil Pile (SWMU 13) and the Uncovered Soil Pile (SWMU 14). In addition, there is a Storm Water System (SWMU 18) grate located near the coal tar drums (solidified product material) on the western side of the main building and a grate on the eastern side of the main building near the support structure for one of the former Aboveground Storage Tanks (AOC B).

SWMU DATA SHEET

RECOMMENDATIONS: No Further Action ( )
Confirmatory Sampling (*)
RFI Necessary ( )

REFERENCE(S): 100

COMMENTS: * Dura-Bond is awaiting the results of sampling performed on the segregated dirt piles from the excavation area. Surface water runoff from the vicinity of these piles may constitute a release of wastes to the Storm Water System (SWMU 18). In addition, the integrity of the Storm Water System (SWMU 18) and its layout is unknown. Confirmatory sampling is warranted and should include a survey of the system which identifies all influent and effluent points as well as an integrity determination.

SWMU NUMBER: 19 **PHOTOGRAPH NUMBER:** 19.1, 19.2, 19.3, 19.4

NAME: Drainage Ditch

TYPE OF UNIT: Unlined Drainage Ditch

PERIOD OF OPERATION: 1987 to 1992

PHYSICAL DESCRIPTION AND CONDITION: The drainage ditch runs in a north-south direction to the east of the main facility building. It begins near the Wheelabrator® Dust Collector (SWMU 5) as level ground and gradually deepens as it approaches the north drive-through. Its maximum depth is approximately 1 to 1.5 feet deep. It varies in width from approximately one to three feet and is unlined. The corrugated metal culverts which are used under the drive-through and walkway areas were installed very recently, according to Mr. Norris.

South of the Compressor Area (AOC A), the water in the drainage ditch was a deep brown color with patches of light brown foam floating on the surface. According to the facility representative, this discoloration and foam was from recently applied top soil on the eastern bank, as seen in photograph 19.1 in Appendix B. The water in the ditch was very shallow and there was minimal flow. One side of the ditch is formed by a concrete wall for a few feet in this area, where it runs along the walkway for the office building. The ditch passes to the west of one of the former Underground and Aboveground Storage Tanks (AOC B) near the south parking lot. It becomes shallower and less defined toward the south of the property. The ditch ends at the southern side of the property line and discharges through a double concrete culvert which empties into the Highway Avenue drainage ditch through a double corrugated metal discharge pipe. A few rocks located near the water level of the Highway Avenue drainage ditch have a reddish tint from algal growth.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: There was evidence of Wheelabrator® dust around the Wheelabrator® Dust Collector (SWMU 5) which could runoff into this unit. The Compressor Area (AOC A) and Ramp Area (SWMU 7) are located adjacent to or in close proximity to the Drainage Ditch. The Drainage Ditch also receives ground-water discharge from the Wheelabrator® Sump (AOC C). According to the facility representatives, only ground water would be discharged to the ditch from the sump since the shot is removed and reused, the dust goes to the Wheelabrator® Dust Collector (SWMU 5), and the water collected is at a low point and is only the result of ground-water infiltration.

RELEASE PATHWAYS: Air (L) Surface Water (H) Soil (H) Ground Water (H) Subsurface Gas (U)

HISTORY AND/OR EVIDENCE OF RELEASE(S): The ditch begins on the north side of the facility near the Wheelabrator® Dust Collector (SWMU 5). The soil surface in this area is dark. According to Dura-Bond officials, sandblast residue from the outside sandblaster was used as fill in this area. This may have contained Black Beauty™, which is a by-product of the combustion of coal that is processed into an abrasive product. It typically is composed of fused ferro-alumino-silicate which is formed when molten slag is quenched in cold water. The end result is a course non-crystalline black glass. Black Beauty™ contains several hazardous constituents including antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, selenium, silver, thallium, vanadium, and zinc. There is concern that Black Beauty™ could enter environmental media through runoff to surface water or leaching to ground water. The Compressor Area (AOC A) and Ramp Area (SWMU 7) are located adjacent to or in close proximity to the Drainage Ditch (SWMU 19).

RECOMMENDATIONS:

No Further Action ( )
Confirmatory Sampling (*)
RFI Necessary ( )

REFERENCE(S): 100

COMMENTS: * The facility should determine the extent of any contamination to the ditch which may have resulted from any runoff or seepage from nearby operations, processes, and SWMUs or AOCs. The sandblast residue from the outside sandblaster was used as fill in this area. This may have contained Black Beauty™.

The Compressor Area (AOC A) and Ramp Area (SWMU 7) are located adjacent to or in close proximity to the Drainage Ditch. If confirmatory sampling reveals that hazardous constituents are present in the surrounding media, then further investigation of this unit is warranted.

SWMU DATA SHEET

SWMU NUMBER: 20 **PHOTOGRAPH NUMBER:** 20.1, 20.2

NAME: Paint Can Excavation Drum Storage Area

TYPE OF UNIT: Drum Storage Area

PERIOD OF OPERATION: 1992

PHYSICAL DESCRIPTION AND CONDITION: Approximately fifty 55-gallon drums were filled with soil from the Paint Cans Excavation Area (SWMU 12) and placed in the southwest corner of the facility near the Construction Debris Pile (SWMU 17). The drums were sealed and stored on wooden pallets in a row running east-west.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: According to Dura-Bond officials, at the time the Paint Cans Excavation Area (SWMU 12) was discovered, some of the five-gallon cans had ruptured and the soil around the paint cans was saturated with paint. The paint was recognized as red lead-based primer paint which Florida Steel once used on some of its Department of Transportation projects. Mr. Elrod stated that 3.5 to 4 gallons of product were recovered from this area. Mr. Oliveros stated that the surrounding soils were contaminated with VOCs based on visual observations, odor, and high OVA readings. Within 24 hours of discovery of this unit, Missimer consultants took samples of the saturated soil and the surrounding cans. Samples were also taken of the runoff in contact with these wastes. The waste paint was containerized and stored onsite in the Paint Can Excavation Storage Area (SWMU 20). Sorbents were also applied to contain any remaining spill material. Approximately 50 drums were filled with potentially contaminated soil from the excavation pit and stored at this unit.

RELEASE PATHWAYS: Air (L) Surface Water (L) Soil (L)
Ground Water (L) Subsurface Gas (L)

HISTORY AND/OR EVIDENCE OF RELEASE(S): According to Mr. Elrod, the paint cans were unearthed on April 8, 1992. On April 9, 1992, all of the paint cans had been containerized. By June 11, 1992, the two nearby soil piles had been created and the storage drums filled. Task Environmental of Tampa, Florida conducted the paint can removal.

Sampling results of the paint sludge using a flame ionization detector indicated contamination at the following levels: 270,000 to 540,000 ppm lead; 500,000 to 680,000 ppb ethylbenzene; 2,900,000 to 3,300,000 ppb total xylenes; 1,800,000 ppb toluene; 760,000 ppb MEK; 24 ppm barium; and 53 ppm selenium. Sampling results for the standing water in this area indicate contamination at the following levels: 12 ppm lead; 350 ppm chromium; 8,000,000 ppb ethylbenzene; 145,837 ppm total petroleum hydrocarbons; and 22,000,000 ppb total xylenes. Sampling results for the surrounding soil showed contamination at the following levels: 2,000 ppm lead; 120 ppm barium; 72 ppm chromium; 22,000 ppb MEK; 61,000 ppb acetone; 390,000 ppb ethylbenzene; 49,000 ppb toluene; and 220,000 ppb total xylenes (References 99, 105). Sampling results are shown in Table III-1.

RECOMMENDATIONS: No Further Action (*)
Confirmatory Sampling ( )
RFI Necessary ( )

REFERENCE(S): 100, 101

COMMENTS: * The facility should comply with the 90 day storage limitation for nonpermitted storage units managing hazardous wastes.

SWMU NUMBER: 21 **PHOTOGRAPH NUMBER:** 21.1

NAME: Construction Debris/Soil Pile

TYPE OF UNIT: Waste Pile

PERIOD OF OPERATION: 1987 to 1992

PHYSICAL DESCRIPTION AND CONDITION: This soil pile is located in the southwest corner of the facility near the 55-gallon drums at the Paint Can Excavation Drum Storage Area (SWMU 20). The pile is approximately 20 feet in diameter and nine feet high and is positioned directly on soil.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: The material contained in this pile was accumulated from the area near the western south drive-through, adjacent to the Paint Cans Excavation Area (SWMU 12). It contains surficial soil and other construction debris from the facility.

RELEASE PATHWAYS: Air (L) Surface Water (L) Soil (L) Ground Water (L) Subsurface Gas (L)

HISTORY AND/OR EVIDENCE OF RELEASE(S): No evidence of unpermitted releases was identified in the available file material or observed during the VSI.

RECOMMENDATIONS: No Further Action (X)
Confirmatory Sampling ( )
RFI Necessary ( )

REFERENCE(S): 20, 100

COMMENTS: None.

SWMU DATA SHEET

SWMU NUMBER: 22 **PHOTOGRAPH NUMBER:** 2.1

NAME: Dumpster

TYPE OF UNIT: Dumpster

PERIOD OF OPERATION: 1987 to 1992

PHYSICAL DESCRIPTION AND CONDITION: This unit is located in the central portion of the facility on the west side of the main facility building. Approximately 1000 rags used for cleaning paint guns and equipment with MEK solvent were disposed each month in this unit. The rags were consequently classified as F005 waste. This unit is now used to dispose of general facility refuse. During the VSI, no rags were observed in this unit. This dumpster is located within an area approximately 20 feet long by 20 feet wide that was identified as a SWMU (Area Immediately Adjacent to Dumpster - SWMU 2) in Dura-Bond's Closure Permit Application. In addition, MEK/paint waste was allegedly discharged to the ground in the Area Immediately Adjacent to the Dumpster (SWMU 2). In an October 1990 inspection report, FDER officials noted the presence of approximately ten drums and numerous smaller containers in the vicinity of this unit.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: Employees disposed of MEK and paint contaminated rags by discarding them in the dumpster. The rags were consequently classified as F005 waste. According to the available file material, Dura-Bond contracted Industrial Services to dispose of the contaminated waste rags.

RELEASE PATHWAYS: Air (L) Surface Water (L) Soil (L) Ground Water (L) Subsurface Gas (U)

HISTORY AND/OR EVIDENCE OF RELEASE(S): No evidence of unpermitted releases from this unit was identified in the available file material or observed during the VSI. No rags were observed during the VSI.

SWMU DATA SHEET

RECOMMENDATIONS:	No Further Action (*) Confirmatory Sampling ( ) RFI Necessary ( )
REFERENCE(S):	20, 28, 29, 100
COMMENTS:	* This unit is addressed under the Area Immediately Adjacent to Dumpster (SWMU 2).

AOC DATA SHEET

AOC: A **PHOTOGRAPH NUMBER:** A.1, A.2

NAME: Compressor Area

TYPE OF UNIT: Process Area

PERIOD OF OPERATION: Unknown to 1992

PHYSICAL DESCRIPTION AND CONDITION: The compressor area is located approximately 15 feet east of the main facility building near the office buildings. This area lies approximately five feet west of the drainage ditch. The compressor is situated on a raised concrete pad which is covered by a roof.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: At the time of the VSI, there was a 55-gallon drum labeled "Oil - Dry" on the south ledge of the structure.

RELEASE PATHWAYS: Air (L) Surface Water (L) Soil (L)
Ground Water (L) Subsurface Gas (U)

HISTORY AND/OR EVIDENCE OF RELEASE(S): Ms. Fellabaum of the FDER stated in the October 1990 FDER hazardous waste inspection report that an oil leak was spreading onto soil in a northeast-southwest direction adjacent to the compressor area, as seen in FDER photograph A.2 in Appendix C. The leak involved only minor surficial staining. It was reportedly cleaned up following its detection. This oil is viscous and may not penetrate into the surrounding soil. It may also degrade relatively quickly. During the VSI, only minor staining was observed which did not appear to warrant further investigation.

RECOMMENDATIONS: No Further Action (*)
Confirmatory Sampling ( )
RFI Necessary ( )

REFERENCE(S): 20, 100

COMMENTS: * No sampling is required, however, the facility should repair the source of the leak to prevent further releases.

AOC: B **PHOTOGRAPH NUMBER:** See 6.1, 7.2

NAME: Underground and Aboveground Storage Tanks

TYPE OF UNIT:

PERIOD OF OPERATION: Unknown to 1989

PHYSICAL DESCRIPTION AND CONDITION: According to FDER and Dura-Bond records, there were, as recently as June 1991, a total of seven tanks, three aboveground and four below ground storage tanks, on the Dura-Bond property. Information provided by Dura-Bond, state, and city files is unclear as to each tank's exact location, capacity, and use. The approximate locations of three of the underground tanks and one of the aboveground tanks are shown in Figure II-8 on page II-33.

A FDER inspector's report noted that one of the aboveground tanks was in contact with the ground. A July 1989 FDER Pollutant Storage Tank Inspection Report noted several recordkeeping and monitoring violations for Dura-Bond's storage tanks. In addition, it was noted that the tanks numbered 1, 2, 3, and 5 were abandoned. According to the report, FDER was not notified of the abandonment and there were no records documenting the tank inventory. Furthermore, the excavation areas for the four tanks were not backfilled.

All of the underground storage tanks had been removed by June 21, 1991. Tank 1 was located immediately south of the north drive-through, near the Ramp Area (SWMU 7). Tank 2 was located between the office buildings, to the north. In June 1991, Dura-Bond also indicated that tanks 4 and 7 would be removed. Tank 7 was the aboveground tank which was in contact with the ground. Tank 4 was an aboveground tank located to the east of the main facility building between the south drive-through and the office building. According to Mr. Norris, Tank 4 was a former 15-ton storage tank which resembled a large railroad tanker. He said that this tank was cut up and removed prior to 1989.

On June 21, 1992, a representative from Missimer & Associates detected filtered and unfiltered OVA levels greater than 1000 ppm in borings adjacent to Tank 2 near the office building. In addition, unfiltered OVA levels of 20 ppm and 28 ppm, and filtered OVA levels of 10 ppm and 18 ppm were detected near Tank 1 at the Ramp Area (SWMU 7).

The underground tanks were removed by Bill Johns Waste Oil Service of Jacksonville. Three above-ground storage tanks built by Dura-Bond were removed by Dura-Bond in 1992 and transported for use at its Pennsylvania facility. At the time of the VSI, there was a white aboveground storage tank which was built by Dura-Bond located between the Temporary Waste Storage Area (SWMU 3) and the Area Immediately Adjacent to the Dumpster (SWMU 2). It was installed by Dura-Bond in 1991.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: According to documents provided by the facility, Dura-Bond registered four petroleum tanks with FDER from 1988 to 1989, two from 1989 to 1991, and one from 1991 to 1992. According to facility representatives, the underground storage tanks existed on the property when the company purchased the facility in 1987. Dura-Bond stated that it had no use for the tanks and was not given any records for them when it bought the property. No other information is available regarding the underground storage tanks.

RELEASE PATHWAYS: Air (L) Surface Water (L) Soil (L) Ground Water (L) Subsurface Gas (L)

HISTORY AND/OR EVIDENCE OF RELEASE(S): Field log book entries made by a representative of Missimer & Associates, Inc. during a sampling visit to take soil borings noted hydrocarbon odors in the soil surrounding tank 4. It was also noted that in one area adjacent to the tank, the boring hole was obstructed by a black tar like substance. Mr. Norris attributed the black substance that was encountered to the presence of asphalt from a buried section of the parking lot. Soil borings taken near tank 2 also revealed a very strong hydrocarbon odor according to the log book entries. No unpermitted releases from any of the tanks were identified in the available file material or observed during the VSI.

RECOMMENDATIONS:

No Further Action ( )
Confirmatory Sampling (*)
RFI Necessary ( )

AOC DATA SHEET

REFERENCE(S): 20, 99, 100, 104

COMMENTS: * The facility should determine the extent of any leakage from tanks 1, 2, and 4. If confirmatory sampling reveals that hazardous constituents are present in the surrounding media, then further investigation of these units is warranted.

AOC: C **PHOTOGRAPH NUMBER:** C.1, C.2

NAME: Wheelabrator® Sump

TYPE OF UNIT: Process Sump

PERIOD OF OPERATION: Unknown to 1992

PHYSICAL DESCRIPTION AND CONDITION: During the VSI, a green garden hose was observed emanating from the ground immediately south of the Wheelabrator® Dust Collector (SWMU 5) on the eastern side of the main facility building. The hose was positioned to discharge to the Drainage Ditch (SWMU 19). According to Mr. Norris, the hose is probably connected to a sump in the Wheelabrator® unit inside the main building which removes ground water from the concrete sump of the Wheelabrator® (the base of the Wheelabrator® is below the ground-water level). He stated that the Wheelabrator® residue is light, and, therefore, was vacuumed into the baghouse and collected in 55-gallon drums rather than being released to this sump. Any steel shot or grit that fell into the sump area could be shoveled and collected for reuse. Because no residual dust reportedly entered the unit, the sump is not a SWMU.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: According to Mr. Norris, the lighter Wheelabrator® residue was collected through the baghouse venting system. Any shot or grit that may have fallen into the sump area was shoveled and collected for reuse. Therefore, only ground water was discharged to the drainage ditch through the hose.

RELEASE PATHWAYS: Air (L) Surface Water (H) Soil (H) Ground Water (H) Subsurface Gas (U)

HISTORY AND/OR EVIDENCE OF RELEASE(S): No evidence of unpermitted releases was identified in the available file material or observed during the VSI.

AOC DATA SHEET

RECOMMENDATIONS: No Further Action (X)
Confirmatory Sampling ( )
RFI Necessary ( )

REFERENCE(S): 20, 100

COMMENTS: None

IV. SUMMARY

Chapter IV consists of five tables identifying the SWMUs and AOCs identified during the VSI conducted on June 25, 1992. Table IV-1 lists all the SWMUs and AOCs identified during the VSI. Table IV-2 is a list of SWMUs requiring no further action at this time and Table IV-3 lists the RCRA-regulated units. Table IV-4 is a list of SWMUs requiring confirmatory sampling, and Table IV-5 identifies the units requiring a RFI. The sampling strategy is presented in Chapter V.

Table IV-1

List of all Solid Waste Management Units (SWMUs)
and Areas of Concern (AOCs)

SWMU NUMBER	SWMU NAME
1.	Area Adjacent to West Side of Main Facility Building
2.	Area Immediately Adjacent to Dumpster
3.	Temporary Waste Storage Area
4.	Hazardous Materials/Waste Storage Area
5.	Wheelabrator® Dust Collector
6.	Waste Oil Tank
7.	Ramp Area
8.	Sandblast Residue Fill Area
9.	Historical Outside Storage Area
10.	Blue Shed
11.	Sheet Metal Building
12.	Paint Cans Excavation Area
13.	Covered Soil Pile
14.	Uncovered Soil Pile
15.	Shot Blast Drum Storage Area
16.	Sandblast Area
17.	Construction Debris Pile
18.	Storm Water System
19.	Drainage Ditch
20.	Paint Can Excavation Drum Storage Area
21.	Construction Debris/Soil Pile
22.	Dumpster

AOC	AOC NAME
A.	Compressor Area
B.	Underground and Aboveground Storage Tanks
C.	Wheelabrator® Sump

Table IV-2

List of SWMUs and AOCs Requiring No Further Action

SWMU NUMBER	SWMU NAME
1.	Area Adjacent to West Side of Main Facility Building
2.	Area Immediately Adjacent to Dumpster
10.	Blue Shed
11.	Sheet Metal Building
15.	Shot Blast Drum Storage
17.	Construction Debris Pile
20.	Paint Can Excavation Drum Storage Area
21.	Construction Debris Soil Pile
22.	Dumpster

AOC	AOC NAME
A.	Compressor Area
C.	Wheelabrator® Sump

Table IV-3

List of SWMUs and AOCs that are RCRA-Regulated Units

SWMU NUMBER	SWMU NAME
1.	Area Adjacent to West Side of Main Facility Building
2.	Area Immediately Adjacent to Dumpster

Table IV-4

List of SWMUs and AOCs Requiring Confirmatory Sampling

SWMU NUMBER	SWMU NAME
3.	Temporary Waste Storage Area
4.	Hazardous Materials/Waste Storage Area
5.	Wheelabrator® Dust Collector
6.	Waste Oil Tank
7.	Ramp Area
8.	Sandblast Residue Fill Area
9.	Historical Outside Storage Area
13.	Covered Soil Pile
14.	Uncovered Soil Pile
16.	Sandblast Area
18.	Storm Water System
19.	Drainage Ditch

AOC	AOC NAME
B.	Underground and Aboveground Storage Tanks

Table IV-5

List of SWMU Requiring an RFI

SWMU NUMBER	SWMU NAME
12.	Paint Cans Excavation Area

V. SUGGESTED SAMPLING STRATEGY

Unit No.	Unit Name	Operational Dates	Suggested Sampling	Evidence of Release (Yes/No)
3	Temporary Waste Storage Area	1987 to 1992	Samples of the soil surrounding the concrete pad should be analyzed by SW846 Test Methods 8240 and 8270, as well as for total metals.	Yes
4	Hazardous Materials/Waste Storage Area	1987 to 1992	Soil samples should be taken along the outside edge of the storage area to determine if MEK was released to the ground during any of the processes which occurred here. There is no lip to contain spills on the concrete floor from draining to the soil outside. Samples should be analyzed by SW846 Test Methods 8240 and 8270, as well as for total metals.	Yes
5	Wheelabrator® Dust Collector	1987 to 1992	Soil samples should be taken in the area surrounding the concrete pad and analyzed by SW846 Test Methods 8240 and 8270, as well as for total metals.	Yes
6	Waste Oil Tank	Unknown to 1989	Samples from the former tank area should analyzed by SW846 Test Methods 8240 and 8270, as well as for total metals, since no sampling results are available from the time of excavation and removal.	No
7	Ramp Area	Unknown to 1992	Samples of the soil surrounding the concrete pad should be analyzed by SW846 Test Methods 8240 and 8270, as well as total metals.	Yes

V. SUGGESTED SAMPLING STRATEGY (CONTINUED)

Unit No.	Unit Name	Operational Dates	Suggested Sampling	Evidence of Release (Yes/No)
8	Sandblast Residue Fill Area	1987 to 1992	Soil samples should be taken in the vicinity of the two fill areas for sandblast residue and analyzed by SW846 Test Methods 8240 and 8270, as well as for total metals.	Yes
9	Historical Outside Storage Area	1987 to 1992	Soil samples should be taken in the area surrounding the concrete pad and analyzed for by SW846 Test Methods 8240 and 8270, as well as for total metals.	Yes
13	Covered Soil Pile	1992	Samples from the pile and the surrounding area should be taken and analyzed by SW846 Test Methods 8240 and 8270, as well as for total metals.	Yes
14	Uncovered Soil Pile	1992	Samples from the pile and the surrounding area should be taken and analyzed for by SW846 Test Methods 8240 and 8270, as well as for total metals.	Yes
16	Sandblast Area	1987 to 1992	Soil samples should be taken from the pile and in the area adjacent to the pile and analyzed for by SW846 Test Methods 8240 and 8270, as well as for total metals.	Yes
18	Storm Water System	Unknown to 1992	Sampling should be conducted in the vicinity of the storm water system drains and analyzed by SW846 Test Methods 8240 and 8270, as well as for total metals.	Yes

V. SUGGESTED SAMPLING STRATEGY (CONTINUED)

Unit No.	Unit Name	Operational Dates	Suggested Sampling	Evidence of Release (Yes/No)
19	Drainage Ditch	1987 to 1992	Soil and surface water samples should be taken along the drainage ditch and analyzed by SW846 Test Methods 8240 and 8270, as well as for total metals Samples should be taken near the Wheelabrator® Dust Collector (SWMU 5), the Ramp Area (SWMU 7) and Tank #4 - one of the Aboveground Storage Tanks (AOC C).	Yes
AOC B	Underground and Aboveground Storage Tanks	Unknown to 1989	Soil samples should be taken in the area adjacent to each former under ground and aboveground storage tank and analyzed by SW846 Test Methods 8240 and 8270, as well as total for metals.	Yes

VI. REFERENCES

1. U.S. Department of Agriculture - Soil Survey of City of Jacksonville, Duval County, Florida, May 1978.

2. Letter from G.E. Tobey, Dura-Bond Protective Coating Co., Inc., to John Peavy, Florida Department of Environmental Regulation (FDER), RE: Blueprints of Dura-Bond, June 9, 1988.

3. Letter from Michael Redig, FDER, to Kevin Hill, Dura-Bond, RE: Small quantity generator Notification of Hazardous Waste Activity. June 21, 1988.

4. Letter of receipt of payment from Thomas O'Pryler for the hauling and disposing of drum, August 25, 1988.

5. FDER Motor Fuel Tank Registration for Dura-Bond, 1989-1990.

6. Notes from plant visit concerning Dion Polyester Resin - 100 drums, February 10, 1989.

7. Letter from W.E.A. Struch, Koppers, Facsimile Message Sheet to Mike Reuder, FDER, RE: Polyester Resin DION ISO, February 13, 1989.

8. Letter from L.J. Farine, Koppers, Facsimile Message Sheet to Mike Reuder, FDER, RE: Polyester Resin DION ISO, February 14, 1989.

9. Letter from R.M. Walters, FRP Supply, to Mike Reuder, FDER, RE: Saling of drums to Dura-Bond, February 20, 1989.

10. State of Florida Corporate Document for Dura-Bond, February 20, 1989.

11. Notes from plant visit concerning the moving of drums by Buffalo Tank, February 20, 1989.

12. FDER Telephone Conversation Record from Jim Batter, RE: Drums moved by Dura-Bonds hauler, February 24, 1989.

13. Notice to Correct Source of Pollution/Violation to Dura-Bond, July 24, 1989.

14. Letter from Kevin Hill, Dura-Bond, to Alan Obaigbena, Department of Health, Welfare & Bio-Environmental Services, RE: Recent inspection of underground storage tanks, July 28, 1989.

15. Letter from Alan G. Obaigbena, Department of Health, Welfare & Bio-Environmental Services, to Kevin Hill, Dura-Bond, RE: Removal of underground tanks, August 2, 1989.

16. FDER Storage Tank Notification Form for Dura-Bond, August 7, 1989.

17. Purchase Order from Dura-Bond to Gartner Rag, Co., March 1, 1990.

18. FDER - Inspection Form - Aboveground Tank Section, April 10, 1990.

19. Hazardous Waste Site Inspection Unit Interview Summary for Dura-Bond, October 22, 1990.

20. Letter from Ernest Frey, FDER, to Hiram Jones, Dura-Bond, RE: High Priority Hazardous Waste Violations. December 5, 1990.

21. Correspondence from Larry Morgan, FDER, to Dale Twachtmann, FDER, RE: Legal Sufficiency Review of Civil Penalty Authorization Memo Dura-Bond Protective Coating. December 21, 1990.

22. Correspondence from Danny Waters, Dura-Bond, to Mr. Hall, RE: Wheelabrator® Dust Collector - 12 ton per year, January 9, 1991.

23. Letter from Phillip Moffses, Chemical Conservation Corporation, to Hiram Jones, Dura-Bond Steel Corp., RE: Pick-up and transport hazardous waste. January 9, 1991.

24. Letter from Hiram Jones, Dura-Bond Steel Corp., to Pamela Fellabaum, FDER, RE: Sold two drums of material to Bob Mathews Construction Company. January 10, 1991.

25. Inspection of Dura-Bond for permitting requirements, January 11, 1991.

26. Letter from Hiram Jones, Dura-Bond Steel Corp., to Pamela Fellabaum, FDER, RE: Safety Meetings. January 14, 1991.

27. Letter from Hiram Jones, Dura-Bond Steel Corp., to Pamela Fellabaum, FDER, RE: Letter to Dura-Bond Protective Coating Co., Inc. January 15, 1991.

28. Letter from Nick LaDuca, Industrial Services, to Hiram Jones, Dura-Bond, RE: Shop towel service, January 15, 1991.

29. Letter from Hiram Jones, Dura-Bond Steel Corp., to Pamela Fellabaum, FDER, RE: Purchase Order issues to Industrial Services. January 16, 1991.

30. Letter from Hiram Jones, Dura-Bond Steel Corp., to Pamela Fellabaum, FDER, RE: Inventory sheets. January 18, 1991.

31. Letter from Hiram Jones, Dura-Bond Steel Corp., to Pamela Fellabaum, FDER, RE: Revised inventory. January 22, 1991.

32. Letter from Hiram Jones, Dura-Bond Steel Corp., to Pamela Fellabaum, FDER, RE: Tour of plant. January 23, 1991.

33. Letter from Michael Redig, FDER, to Kevin Hill, Dura-Bond Steel Corp., RE: Name change for Dura-Bond. January 24, 1991.

34. Letter from Hiram Jones, Dura-Bond Steel Corp., to Pamela Fellabaum, FDER, RE: Uniform Hazardous Waste Manifest. January 29, 1991.

35. Carboline - Material Safety Data Sheet for BITUMASTIC 300M Part A, January 29, 1991.

36. Letter from Danny Waters, Dura-Bond Steel Corp., to Pamela Fellabaum, FDER, RE: Sold 56 drums of material to Chatham Steel. February 1, 1991.

37. Correspondence from Geraldine Robbins, RSDI Environmental, Inc., to Pamela Fellabaum, FDER, RE: Soil Assessment Plan - Dura-Bond Protective Coating Company. February 5, 1991.

38. Correspondence from Geraldine Robbins, RSDI Environmental, Inc., to Pamela Fellabaum, FDER, RE: Revised Soil Assessment Plan - Dura-Bond Protective Coating Company. February 6, 1991.

39. Correspondence from Geraldine Robbins, RSDI Environmental, Inc., to Pamela Fellabaum, FDER, RE: Approx. Soil Sample Locations. February 6, 1991.

40. Correspondence from Danny Waters, Dura-Bond Protective Coating Company, to Pamela Fellabaum, FDER, RE: Pam Chatham Associated Iron & Metal, Inc. would not buy drums. February 2, 1991.

41. Correspondence from Geraldine Robbins, RSDI Environmental, Inc., to Pamela Fellabaum, FDER, RE: Revised Soil Assessment Plan. February 6, 1991.

42. Correspondence from Geraldine Robbins, RSDI Environmental, Inc., to Pamela Fellabaum, FDER, RE: Certificate of Analysis. February 15, 1991.

43. Letter from Michael Redig, FDER, to Hiram Jones, Dura-Bond Steel Corp., RE: Application for a hazardous waste DER/EPA I.D. Number. February 14, 1991.

44. Correspondence from Hiram Jones, Dura-Bond Steel Corp., to Pamela Fellabaum, FDER, RE: Tests results from Geraghty and Miller. February 28, 1991.

45. Letter from Pamela Fellabaum, FDER, to Hiram Jones, Dura-Bond Steel Corp., RE: Correct classification of the waste MEK generated. February 28, 1991.

46. FDER vs. Dura-Bond, Consent Order, March 5, 1991.

47. Letter from Pamela Fellabaum, FDER, to Hiram Jones, Dura-Bond Steel Corp., RE: Hazardous Waste Inspection. March 12, 1991.

48. Correspondence from Danny Waters, Dura-Bond Protective Coating, to Pamela Fellabaum, FDER, RE: Inventory of all 55-gallon drums. March 22, 1991.

49. Letter from Danny Waters, Dura-Bond Steel Corp., to Pamela Fellabaum, FDER, RE: Violation 40 CFR 262.11. April 2, 1991.

50. Letter from Danny Waters, Dura-Bond Steel Corp., to Pamela Fellabaum, FDER, RE: Shipment of 26 drums of material to Chemical Conservation Corporation. April 23, 1991.

51. FDER Pollutant Storage Tank System Inspection Report Form for Dura-Bond, June 21, 1991.

52. Letter from Hiram Jones, Dura-Bond, to Alan Obaigbena, Department of Health, Welfare & Bio-Environmental Services, RE: Notice to Correct Source of Pollution/Violation, July 3, 1991.

53. Letter from James Manning, Department of Health, Welfare & Bio-Environmental Services, to Dura-Bond, RE: Cease and Desist Citation, July 29, 1991.

54. Correspondence from Hiram Jones, Dura-Bond, to Tim Griffin, Dan Roush, Grace Tobey, Dura-Bond, RE: Ordering of paint with VOC's, July 30, 1991.

55. Correspondence from Bruce Crichton, Sherwin-Williams Company, to Hiram Jones, Dura-Bond, RE: Data pages (Primer & Finish), July 30, 1991.

56. FDER Application to Operate/Construct Air Pollution Sources for Dura-Bond, July 31, 1991.

57. VOC Calculations from Anchor Engineering, Inc. for Dura-Bond, July 31, 1991.

58. Letter from Wayne Norris, Dura-Bond, RE: Authorization for Anchor Engineering to represent Dura-Bond in obtaining construction and operation permits, August 5, 1991.

59. Letter from Ronald Bongiovanni, Anchor Engineering, Inc., to James Manning, Department of Health, Welfare & Bio-Environmental Services, RE: Cease and Desist Citation, August 6, 1991.

60. Letter from James Manning, Dept. of Health, Welfare & Bio-Environmental Services, to Ronald Bongiovanni, Anchor Engineering, Inc., RE: Operation without a permit, August 23, 1991.

61. Correspondence from Pamela Fellabaum, FDER, to Merlin Russell, FDER, RE: Dura-Bond Steel Corp. September 4, 1991.

62. Letter from Sidney Ansbacher, Brant, Moore, Sapp, MacDonald & Wells, to Vicky Valade, FDER, RE: Dura-Bond adv. DER. September 5, 1991.

63. Letter from Hiram Jones, Dura-Bond, to Jerry Woosley, Department of Health, Welfare & Bio-Environmental Services, RE: Attachment "A" - Projects Exceeding 3.5 VOC in Last Year, September 9, 1991.

64. Letter from Sidney Ansbacher, Brant, Moore, Sapp, MacDonald & Wells, to John Ingle, FDER, RE: Dura-Bond Steel Corp. September 13, 1991.

65. Letter from Sidney Ansbacher, Brant, Moore, Sapp, MacDonald & Wells, to John Ingle, FDER, RE: Dura-Bond Steel adv. FDER. September 18, 1991.

66. Permit Review Sheet for Dura-Bond, September 24, 1991.

67. Department of Health, Welfare & Bio-Environmental Services Certification for Dura-Bond's Spray Painting and Blasting Operation, September 26, 1991.

68. FDER vs. Dura-Bond - Modification to Consent Order, October 7, 1991.

69. Letter from James Manning, Department of Health, Welfare & Bio-Environmental Services, to Hiram Jones, Dura-Bond, RE: Exceeding the RACT emission limiting standards for VOC, October 18, 1991.

70. Letter from Joseph Fleischmann, Dura-Bond, to James Manning, Department of Health, Welfare & Bio-Environmental Services, RE: Citation and Consent Order, October 30, 1991.

71. Letter from Joe Fleischmann, Dura-Bond Steel Corp., to Senator Connie Mack, United States Senate, RE: Complaint of the FDER. October 31, 1991.

72. Letter from Sidney Ansbacher, Brant, Moore, Sapp, MacDonald & Wells, to Mike Fitzsimmons, FDER, RE: Dura-Bond. November 4, 1991.

73. Phone Conversation Record from Joe Fleischmann, Dura-Bond, RE: Consent Order/Permit Requirements, November 6, 1991.

74. FDER vs. Dura-Bond, Consent Order - Operation of Air Pollution Sources Without a Permit, November 12, 1991.

75. FDER vs. Dura-Bond, Order Adopting Consent Order, November 12, 1991.

76. Letter from Sidney Ansbacher, Brant, Moore, Sapp, MacDonald & Wells, to Lorraine Clark, FDER, RE: Insurance Related for RCRA Application/Dura-Bond Steel Corp. November 21, 1991.

77. Letter from James Manning, Department of Health, Welfare & Bio-Environmental Services, to Hiram Jones, Dura-Bond, RE: Consent Order and JEPB Order for settlement, November 21, 1991.

78. Letter from Ernest Frey, FDER, to Ronald Bongiovanni, Anchor Engineering, Inc., RE: Notice of Permit to construct the subject air pollution source, November 27, 1991.

79. Draft letter from C. Lardner and J. Elias, FDER, to Senator Ander Crenshaw, Senate Office Building, Tallahassee, Florida, RE: Inspection of Dura-Bond Steel Corp. December, 1991.

80. Observation Sheet for Dura-Bond, January 17, 1992.

81. Letter from Darryl Dayson, Enviropact, to Ronald Bongiovanni, Anchor Engineering, Inc., RE: Results from the visible emissions test, January 24, 1992.

82. FDER Air Pollution Sources Certificate of Completion of Construction for Dura-Bond, January 24, 1992.

83. Letter from William Beeson, Missimer & Associates, Inc., to Vicky Valade, FDER, RE: Dura-Bond Steel Corp. Closure permit application. January 27, 1992.

84. Correspondence from Anchor Engineering, Inc., to Darrel Hall, Department of Health, Welfare & Bio-Environmental Services, RE: Air Pollution Sources Certificate of Completion of Construction, January 28, 1992.

85. AQD VE Test Review for Dura-Bond, January 29, 1992.

86. Payment for Air Pollution Application Review fees from Dura-Bond, January 31, 1992.

87. Application Tracking System for Dura-Bond, February 3, 1992.

88. Permit Review Sheet for Dura-Bond - Spray painting and blasting operation, April 6, 1992.

89. Letter from Sidney Ansbacher, Brant, Moore, Sapp, MacDonald & Wells, to Roderick Shaw, Esquire, RE: Dura-Bond demands cost recovery from former owner Florida Steel. April 9, 1992.

90. Letter from Sidney Ansbacher, Brant, Moore, Sapp, MacDonald & Wells, to Mike Fitzsimmons, FDER, RE: Dura-Bond demands cost recovery from former owner Florida Steel. April 9, 1992.

91. Certification for Dura-Bond - Spray Painting and Blasting Operation, April 14, 1992.

92. Hazardous Waste Facility Closure - Permit Application for Dura-Bond, April 21, 1992.

93. FDER Pollution Storage Tank System Inspection Report Form for Dura-Bond, April 23, 1992.

94. Letter from Grace Tobey, Dura-Bond Steel Corp., to Pamela Fellabaum, FDER, RE: Shipment of 17 drums of material to Chemical Conservation Corporation. May 8, 1992.

95. Dura-Bond Violation - Land Disposal of hazardous waste without a permit, undated.

96. Dura-Bond Violation - Facility disposing of F005 Waste Rags in dumpster, undated.

97. Dura-Bond Violation - Container requirements, undated.

98. FDER State of the Environment, Ground Water Quality Monitoring Network, undated.

99. VSI Notification Letter Information Needs material provided by John Elrod, Missimer & Associates, Inc., June 25, 1992.

100. VSI Logbook, kept by David Kassel, A.T. Kearney, Inc., June 25, 1992.

101. VSI Logbook, kept by Phebe Davol, A.T. Kearney, Inc., June 25, 1992.

102. Additional Information Needs material provided by John Elrod, Missimer & Associates, Inc., July 1, 1992.

103. Fax from David Dorrow, Reed Minerals, to Phebe Davol, A.T. Kearney, Inc., RE: Black Beauty abrasive material. July 8, 1992.

104. Telephone Conversation Record from David Kassel, A.T. Kearney, Inc., to Wayne Norris, Dura-Bond, RE: Additional information needs, July 10, 1992.

105. Telephone Conversation Record From David Kassel, A.T. Kearney, Inc. to John Elrod, Missimer & Associates, Inc., RE: Sampling Results, July 14, 1992.

106. Fax From John Elrod, Missimer & Associates, Inc., to Phebe Davol, A.T. Kearney, Inc., RE: Wheelabrator® Dust sampling results, July 23, 1992.

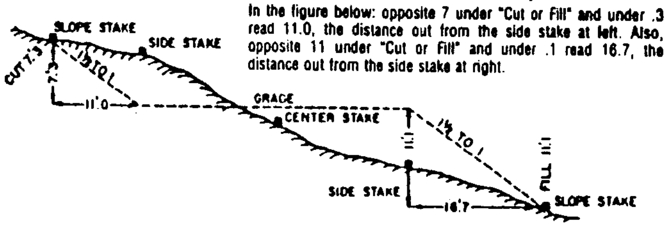
APPENDIX A

VSI LOG BOOKS

DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING

Roadway of any Width. Side Slopes 1½ to 1.

In the figure below: opposite 7 under "Cut or Fill" and under .3 read 11.0, the distance out from the side stake at left. Also, opposite 11 under "Cut or Fill" and under .1 read 16.7, the distance out from the side stake at right.



Cut or Fill	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	Cut or Fill
	Distance out from Side or Shoulder Stake										
0	0.0	0.2	0.3	0.5	0.6	0.8	0.9	1.1	1.2	1.4	0
1	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.7	2.9	1
2	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.4	2
3	4.5	4.7	4.8	5.0	5.1	5.3	5.4	5.6	5.7	5.9	3
4	6.0	6.2	6.3	6.5	6.6	6.8	6.9	7.1	7.2	7.4	4
5	7.5	7.7	7.8	8.0	8.1	8.3	8.4	8.6	8.7	8.9	5
6	9.0	9.2	9.3	9.5	9.6	9.8	9.9	10.1	10.2	10.4	6
7	10.5	10.7	10.8	11.0	11.1	11.3	11.4	11.6	11.7	11.9	7
8	12.0	12.2	12.3	12.5	12.6	12.8	12.9	13.1	13.2	13.4	8
9	13.5	13.7	13.8	14.0	14.1	14.3	14.4	14.6	14.7	14.9	9
10	15.0	15.2	15.3	15.5	15.6	15.8	15.9	16.1	18.2	16.4	10
11	16.5	16.7	16.8	17.0	17.1	17.3	17.4	17.6	17.7	17.9	11
12	18.0	18.2	18.3	18.5	18.6	18.8	18.9	19.1	19.2	19.4	12
13	19.5	19.7	19.8	20.0	20.1	20.3	20.4	20.6	20.7	20.9	13
14	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.4	14
15	22.5	22.7	22.8	23.0	23.1	23.3	23.4	23.6	23.7	23.9	15
16	24.0	24.2	24.3	24.5	24.6	24.8	24.9	25.1	25.2	25.4	16
17	25.5	25.7	25.8	28.0	26.1	26.3	26.4	26.6	26.7	26.9	17
18	27.0	27.2	27.3	27.5	27.6	27.8	27.9	28.1	28.2	28.4	18
19	28.5	28.7	28.8	29.0	29.1	29.3	29.4	29.6	29.7	29.9	19
20	30.0	30.2	30.3	30.5	30.6	30.8	30.9	31.1	31.2	31.4	20
21	31.5	31.7	31.8	32.0	32.1	32.3	32.4	32.6	32.7	32.9	21
22	33.0	33.2	33.3	33.5	33.6	33.8	33.9	34.1	34.2	34.4	22
23	34.5	34.7	34.8	35.0	35.1	35.3	35.4	35.6	35.7	35.9	23
24	36.0	36.2	36.3	36.5	36.6	36.8	36.9	37.1	37.2	37.4	24
25	37.5	37.7	37.8	38.0	38.1	38.3	38.4	38.6	38.7	38.9	25
26	39.0	39.2	39.3	39.5	39.6	39.8	39.9	40.1	40.2	40.4	26
27	40.5	40.7	40.8	41.0	41.1	41.3	41.4	41.6	41.7	41.9	27
28	42.0	42.2	42.3	42.5	42.6	42.8	42.9	43.1	43.2	43.4	28
29	43.5	43.7	43.6	44.0	44.1	44.3	44.4	44.6	44.7	44.9	29
30	45.0	45.2	45.3	45.5	45.6	45.8	45.9	46.1	48.2	46.4	30
31	46.5	46.7	46.8	47.0	47.1	47.3	47.4	47.6	47.7	47.9	31
32	48.0	48.2	48.3	48.5	48.6	48.8	48.9	49.1	49.2	49.4	32
33	49.5	49.7	49.8	50.0	50.1	60.3	50.4	50.6	50.7	50.9	33
34	51.0	51.2	51.3	51.5	51.6	51.8	51.9	52.1	52.2	52.4	34
35	52.5	52.7	52.8	53.0	53.1	63.3	53.4	53.6	53.7	53.9	35
36	54.0	54.2	54.3	54.5	54.6	54.8	54.9	55.1	55.2	55.4	36
37	55.5	55.7	55.8	56.0	56.1	56.3	56.4	56.6	58.7	56.9	37
38	57.0	57.2	57.3	57.5	57.6	57.8	57.9	58.1	58.2	68.4	38
39	58.5	56.7	58.8	59.0	59.1	59.3	59.4	59.6	59.7	59.9	39
40	60.0	80.2	60.3	60.5	60.6	60.8	60.9	61.1	61.2	61.4	40

Duro-Bond Steel Corporation
R04-21-18
140 Ellis Road
Jacksonville, FL

Property of A. T. Kearney
225 Reinekers Ln
Alexandria, VA 22314
703/548-4700

Site Visit conducted by:
David Kassel
Phebe Davol
Davy Simonson

The paper in this book is made of 50% high grade rag stock with a WATER RESISTING surface sizing.

CONTENTS

PAGE NO.	REFERENCE	DATE

6/25/92 Thursday

GW flows to S/SE (Final [illegible])

J-726 Withdrawal Wells
1971-1972

Bio-Environmental Services
File [illegible] J-###

Wheelabrator Dust Collector
12 Ton/year
1200 MH per year
(which is MH)

Ref 22 - Drums they sell
dust in 55 gallon drums
and sold as scrap

6/25/92 [illegible]

Introductory Meeting - Sign in Dave's Book

1984 Haz & Solid Waste Amend gave EPA the authority to address releases from areas other than regulated units. In order to achieve this an RFA or RCRA Facility Assessment is performed which begins w/

1) Review of file material, and discussions w/ state & federal regulatory authorities

2) A preliminary list of solid waste mgmt units or areas of concern is made

3) A VSI is performed to visually assess these SWMUs or AOCs. ~~[illegible]~~ Based on the file review and VSI determinations as to the potential for release to env. media (e.g. soil, gw, sw, air & ssg) are made.

4) Based on these findings

and following a review by the EPA, State and facility corrective action may be enacted. This is conducted either through confirmatory sampling or an RFI to determine the nature & extent of contamination caused by the release. If a release is found a corrective measures study is [illegible] to remove the contamination

5 H & S issues - Hard hat, glasses, steel toe boots & ear protection assure understand

DW

1/4 8:40 AM Left hotel for site. Sunny w/ some clouds winds (light) from South/southwest) ~ 80°F

Met Wayne Norris of John M. Elrod, P.G. Missimer & Associates, Inc. Jacksonville, FL

Jim Oliver

John Elrod – Property owners, March 1, 1992 – present activities

Florida ~~State~~ Steel is paying for clean-up of the paint can area.

John ~~[illegible]~~ provided map & responses

176 Closure req. by FL for USTs
FDER had authority of over USTs.

No requirement for soil sampling at USTs when removed. They have checked w/ CVA and no releases or evidence was detected

1/5

High releases at of CVA at heating oil tank. High [illegible] methane occur in Florida soils.
→ This used to be a rice farming area.

1955 – [illegible] County [illegible]

~~1955~~ – Unknown what was before 1955

At one time there was an [illegible] well – possibly J-7D6.

R-Sanborn Fire Insurance Maps
City of Jack
U. North Florida has Sanborn
Area Map

They waste work & Chem Cons. [illegible] or MI for [illegible] [illegible] drums of waste. [illegible] spent solvent – they [illegible] they consolidated many of the solvent drums.

1/10/87

Sandblast area near wastewater
=> free to gravel and grading
with low lying areas

Sandblasting done at raw steel
so there was no sandblasting
of paint

Heating & metal shop to clean the
steel. This steel is not "hazardous"

— Associated Iron & Metal →
now at Chitkara.

Reichold to the north
Chemical

Buffer tank - makes LST and have
Duralead ~~paint~~ coast, and and paint
Epoxy paint for water

STIP-3 Steel tank w/
coal tar and cathodic protection

18

1/7

All cans were removed from yard.
Paint
High OVA readings bagged
20 x 20
* Falcon 29 - landsite
Request copy of all [illegible]
Florida Steel recognized these
as theirs for use for DOT

1970s - when these paint cans were disposed
[illegible] paint [illegible] [illegible]
[illegible] possibly Bushnell, [illegible]
area to near an old creek
old area. Missouri [illegible]
as a wash out area [illegible]
[illegible] with dry [illegible]
[illegible] (i.e. dry well?)
6 - 8" diesel pump
[illegible]
xylene
Soil around cans was saturated
w/ paint
Samples w/ the liquid [illegible]
from can [illegible] → [illegible]

1/10

1/11

ground. Cans broken and they
[illegible]

3 1/2 gallons of product
recovered. Containers of these [illegible]
to still on site.
Put down absorbent to contain
any spillage. 5 gallon cans (rusted)
were.

Sewage goes to sewer line →
to City POTW
No process water used on site,
therefore no industrial wastewater
is discharged.
They used to have septic tank for
sanitary wastes. Tues [illegible] out
of [illegible].
There is a lift station to
"lift" sewage

7' layer of clay [illegible]
15' below surface

1/12

1/13

Maintenance Shop Area
Photo 1-1 Facing east - ue [illegible] / [illegible]

Photo 1-2 Facing SE at Drainage Ditch
Scrap metal parts in foreground from
Maintenance Shop Area

Photo 1-3 / 1-4 Facing South at
Maintenance Shop Area.

Facility for drinking water until
Missouri [illegible] [illegible] Chlorine
on well. 1/2 to 1 [illegible] of gallons
chlorine.
July 1991 [illegible] [illegible] they
went on city water - check
date.

1/5 Facing North at [illegible]
Dust collector unit

Chrome steel in the [illegible]
There are [illegible] [illegible] [illegible]
[illegible] [illegible] chrome

[illegible] [illegible]

1/14

1/15

1/6 Ferry [illegible] at [illegible] wheelbarrow [illegible]
19 drums w/ [illegible]

1/7 Ferry [illegible] from [illegible]

1/8 + 1/9 Ferry East at former piles of grit (sandblasting?) in [illegible] (steel?)

1/10 Ferry NE at the Furnace
Temporary Drum Storage Area

Epoxy paint [illegible]
Request [illegible] Marsh [illegible]

Fresh paint [illegible] sent back to [illegible]
Paint waste w/ F003 + F005
old paint
2 drums up to 30 drums
3-5 [illegible]
[illegible] [illegible]

1/16

1/17

1/11 Fuzing North at Bypass/ Black Brady

1/12 - Fuzing South at Tyree Drum Staging Area 57 drums

1/13 Fuzing North at S[illegible] [illegible] little packing [illegible] good Mill - 2

1/14 Fuzing south at 57 Drums [illegible]

Had [illegible] MEK - waste

1/15 Fuzing south at [illegible] waste / DEK

1/16 Site of Former [illegible] waste ~~paint~~ / [illegible] [illegible] drill in corner to get / to [illegible] complete - good

1/17 Fuzing NW at [illegible]

1/18 Fuzing SW at [illegible]

1/18

1/17

1/19 Facing NE at [illegible] of Drain Strung [illegible] Stormwater Drain [illegible]

Need to [illegible] Drains

1/20 Facing SE at [illegible] 4 [illegible]

1/21 Facing S [illegible] when [illegible] were [illegible].

1/22 Facing [illegible] 6

1/23 Facing west at [illegible] [illegible] [illegible]

1/24 Facing S West [illegible] 5

1/25 Facing west at [illegible] [illegible] construction [illegible] [illegible] [illegible] [illegible]

1/20

1/21

1/26 - Facing west at the former Blue Bell, FDEP [illegible]

1/27 Facing east at [illegible] former Blue Bell [illegible] plate [illegible]

1/28 }
1/29 } Facing west at construction debris
Note drum
1/30

1/31 Facing west at [illegible] — where [illegible] were stored

1/32 }
1/33 } Facing south at drums for [illegible] 55 drums

1/34 }
1/35 } Facing south at [illegible]
1-36 } 1-37 - Facing northeast at excavation.
2-1 } Soil pile from excavation
2-2
2-3

1/27

1/28

ethyl benzene
xylene
~~meth~~ lead (TC fail)
mineral spirits

Florida Steel
8040 ?
(EPA metals ?)

540,000 ppm lead
1500 ppm lead TC

Contaminated soil [illegible] fails TC
and is a waste pile.

2nd soil pile - [illegible]
[illegible], OVA + [illegible]

2-4 } [illegible] sample at [illegible]
2-5 } [illegible] 2nd soil pile

2-6 } [illegible] sample at [illegible]
2-7 } [illegible] [illegible] - [illegible]
[illegible]

1/24

1/25

2-8 } Facing east at [illegible]
2-9 } [illegible]. [illegible]
Staining

2-10 }
2-11 } Facing [illegible] [illegible]
2-12 } NE to SW
2-13 }

2-14 Facing NW at [illegible] of MW-5
MW-3 appears to be [illegible]

2-15 Facing [illegible] for [illegible]

2-16 Facing NE at Drainage Ditch near Sump
2-17 Facing South at former Discharge
Waste Oil Tank

2-18 Facing west at South Drainage area

2-19 Facing N at [illegible] [illegible]
[illegible] [illegible] in South
Drainage area

2-20 [illegible] ([illegible] [illegible])
Actually [illegible] on [illegible] [illegible]

1/26

1/27

2-21 Close-up [illegible] [illegible]
[illegible]

2-22 Facing North [illegible]

2-23 Facing [illegible]
[illegible]

2-24 Facing N[illegible] [illegible]
[illegible]

2-25 Facing South - close-up

2-26 } Facing [illegible]
2-27 } [illegible]
Black [illegible]
[illegible]

2-28
2-29 } [illegible]
2-30 } [illegible]

2-31 Drumset [illegible]
2-32 — [illegible]
drums

2-33 [illegible]

1/28

1/29

route of discharge

2-35 [illegible]

3-1 [illegible]

3-2 [illegible]

3-3 [illegible]

3-4 [illegible]

3-5 [illegible]

3-6 [illegible]

3-7 [illegible]

3-8 [illegible]

Left side [illegible]

[illegible] 1:30

went through [illegible]

1/30

1/31

Arli Skall [illegible] [illegible]
[illegible] [illegible] . [illegible]
had bought the [illegible] [illegible]

Current grade ([illegible]) [illegible]
[illegible] point [illegible] [illegible]
Construction [illegible]

U.S.T.S. [illegible], [illegible]
[illegible] cemented

St John Bluff [illegible] C/W 5 [illegible] Slope
⇒ [illegible] will [illegible] [illegible] [illegible] the
1st 2 bldgs

Schedule Dewey [illegible] Magellan

Need to talk to [illegible] [illegible]
operator [illegible] [illegible] Stand the
[illegible]

Skip [illegible] [illegible] [illegible]
[illegible] a [illegible] [illegible]
[illegible]
U.S. E.A. 4/15 [illegible]
80/35 - [illegible] [illegible]

1/32

1/33

95 % [illegible] (Don)
Jay [illegible] ([illegible]) [illegible]
4th [illegible] ~~[illegible]~~ [illegible]
40 [illegible] [illegible] [illegible]
[illegible]

[illegible] [illegible]

[illegible]

[illegible]

[illegible]

Data to be [illegible]
[illegible] [illegible] - [illegible]
[illegible] [illegible]
[illegible] [illegible]
[illegible] ([illegible] by [illegible]) [illegible])

[illegible]
[illegible]
[illegible] [illegible]

[illegible]

[illegible] — [illegible] [illegible]
[illegible] — [illegible] [illegible],
[illegible], [illegible] [illegible]

1/34

1/35

John will send copies of the information to us

Close-out meeting at NDC
Assessment findings

3-9
there [illegible] form [illegible]
work

3-10 [illegible] met at [illegible]
[illegible] for [illegible]

3-11 [illegible] to the [illegible]
[illegible]
Chris [illegible]

3-12 [illegible] ~~[illegible]~~ SE of
[illegible] [illegible] to [illegible]
[illegible] [illegible]
[illegible]
[illegible]

[illegible] [illegible]
Allen Town [illegible]
Tampa

1/36

1/37

[illegible] 1750

Wind [illegible] [illegible] 25 mph Dark clouds

[illegible]

Info requests

— Stormwater discharge [illegible]

— exploration of water [illegible])

— new list [illegible]

— underground [illegible]

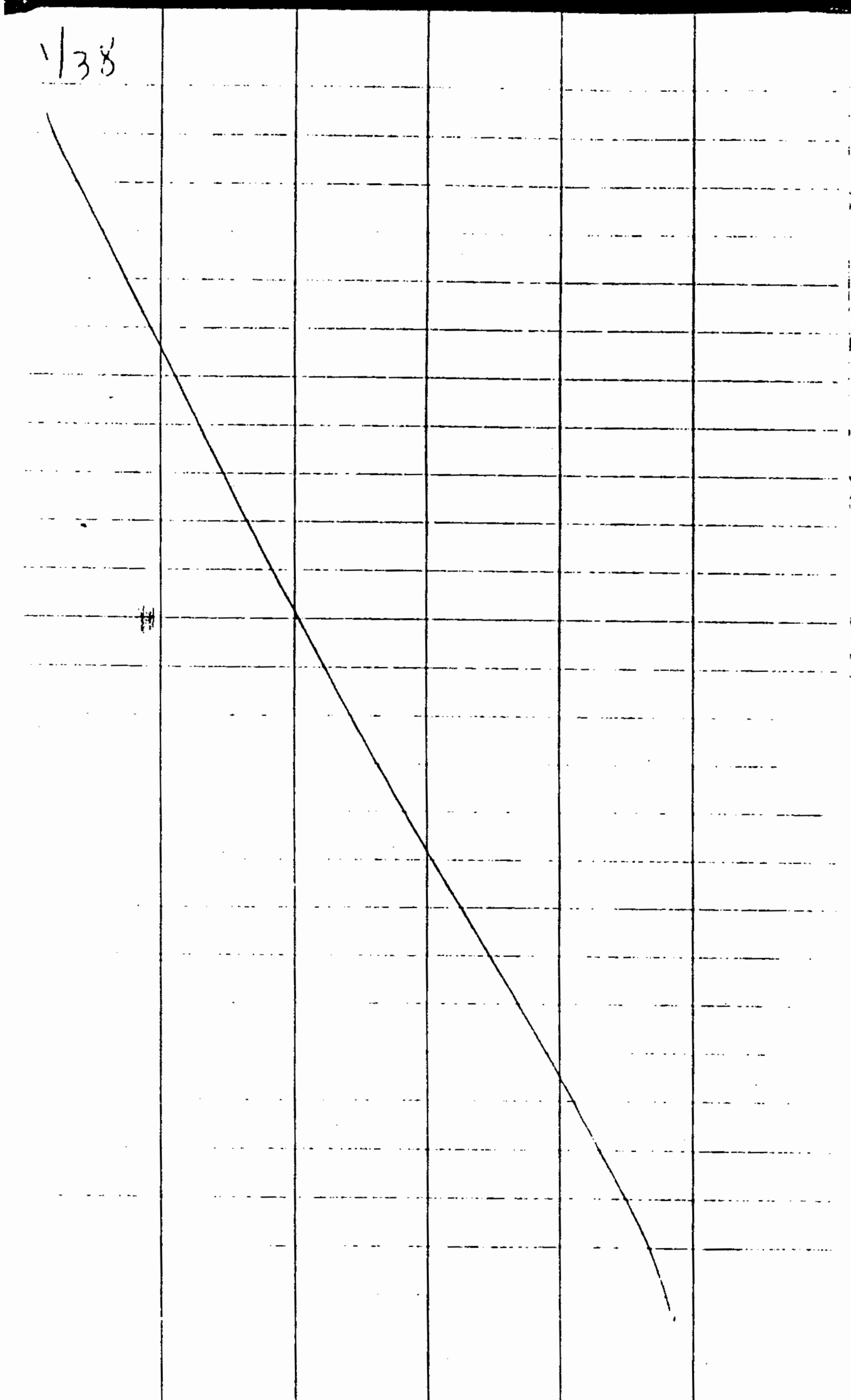
— collect [illegible] samples.

— data from soil sampling → 80% [illegible] not 80%

Would like them to go out and take samples of the [illegible] material [illegible] CFA [illegible]. [illegible] will check [illegible] [illegible] in [illegible] sampling

Left site @ 1830.

1/38

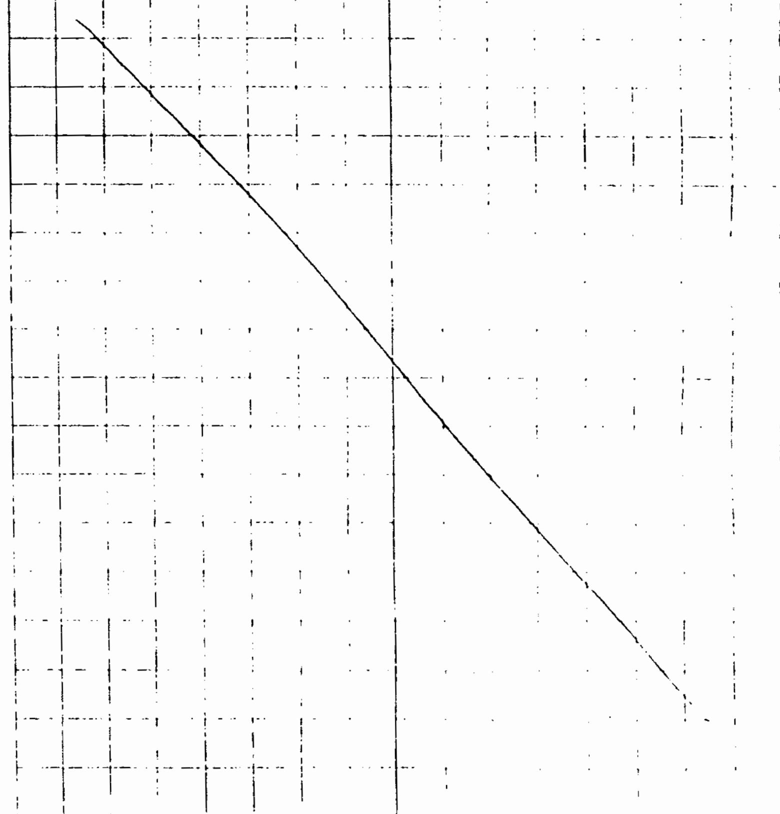


1/37

Drove around the perimeter. Noted the drainage ditch was full of water from rain. Left area & returned to lab.

1830 6/25/92

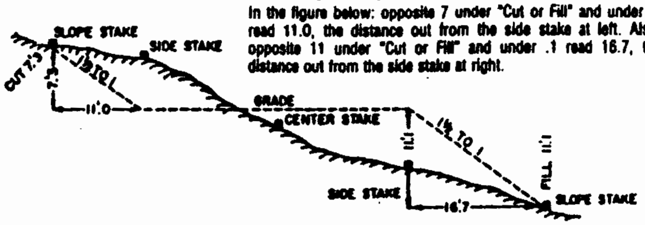
Mike Dunn



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING

Roadway of any Width. Side Slopes 1½ to 1.

In the figure below: opposite 7 under "Cut or Fill" and under .3 read 11.0, the distance out from the side stake at left. Also, opposite 11 under "Cut or Fill" and under .1 read 16.7, the distance out from the side stake at right.



Cut or Fill	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	Cut or Fill
	Distance out from Side or Shoulder Stake										
0	0.0	0.2	0.3	0.5	0.6	0.8	0.9	1.1	1.2	1.4	0
1	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.7	2.9	1
2	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.4	2
3	4.5	4.7	4.8	5.0	5.1	5.3	5.4	5.6	5.7	5.9	3
4	6.0	6.2	6.3	6.5	6.6	6.8	6.9	7.1	7.2	7.4	4
5	7.5	7.7	7.8	8.0	8.1	8.3	8.4	8.6	8.7	8.9	5
6	9.0	9.2	9.3	9.5	9.6	9.8	9.9	10.1	10.2	10.4	6
7	10.5	10.7	10.8	11.0	11.1	11.3	11.4	11.6	11.7	11.9	7
8	12.0	12.2	12.3	12.5	12.6	12.8	12.9	13.1	13.2	13.4	8
9	13.5	13.7	13.8	14.0	14.1	14.3	14.4	14.6	14.7	14.9	9
10	15.0	15.2	15.3	15.5	15.6	15.8	15.9	16.1	16.2	16.4	10
11	16.5	16.7	16.8	17.0	17.1	17.3	17.4	17.6	17.7	17.9	11
12	18.0	18.2	18.3	18.5	18.6	18.8	18.9	19.1	19.2	19.4	12
13	19.5	19.7	19.8	20.0	20.1	20.3	20.4	20.6	20.7	20.9	13
14	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.4	14
15	22.5	22.7	22.8	23.0	23.1	23.3	23.4	23.6	23.7	23.9	15
16	24.0	24.2	24.3	24.5	24.6	24.8	24.9	25.1	25.2	25.4	16
17	25.5	25.7	25.8	26.0	26.1	26.3	26.4	26.6	26.7	26.9	17
18	27.0	27.2	27.3	27.5	27.6	27.8	27.9	28.1	28.2	28.4	18
19	28.5	28.7	28.8	29.0	29.1	29.3	29.4	29.6	29.7	29.9	19
20	30.0	30.2	30.3	30.5	30.6	30.8	30.9	31.1	31.2	31.4	20
21	31.5	31.7	31.8	32.0	32.1	32.3	32.4	32.6	32.7	32.9	21
22	33.0	33.2	33.3	33.5	33.6	33.8	33.9	34.1	34.2	34.4	22
23	34.5	34.7	34.8	35.0	35.1	35.3	35.4	35.6	35.7	35.9	23
24	36.0	36.2	36.3	36.5	36.6	36.8	36.9	37.1	37.2	37.4	24
25	37.5	37.7	37.8	38.0	38.1	38.3	38.4	38.6	38.7	38.9	25
26	39.0	39.2	39.3	39.5	39.6	39.8	39.9	40.1	40.2	40.4	26
27	40.5	40.7	40.8	41.0	41.1	41.3	41.4	41.6	41.7	41.9	27
28	42.0	42.2	42.3	42.5	42.6	42.8	42.9	43.1	43.2	43.4	28
29	43.5	43.7	43.8	44.0	44.1	44.3	44.4	44.6	44.7	44.9	29
30	45.0	45.2	45.3	45.5	45.6	45.8	45.9	46.1	46.2	46.4	30
31	46.5	46.7	46.8	47.0	47.1	47.3	47.4	47.6	47.7	47.9	31
32	48.0	48.2	48.3	48.5	48.6	48.8	48.9	49.1	49.2	49.4	32
33	49.5	49.7	49.8	50.0	50.1	50.3	50.4	50.6	50.7	50.9	33
34	51.0	51.2	51.3	51.5	51.6	51.8	51.9	52.1	52.2	52.4	34
35	52.5	52.7	52.8	53.0	53.1	53.3	53.4	53.6	53.7	53.9	35
36	54.0	54.2	54.3	54.5	54.6	54.8	54.9	55.1	55.2	55.4	36
37	55.5	55.7	55.8	56.0	56.1	56.3	56.4	56.6	56.7	56.9	37
38	57.0	57.2	57.3	57.5	57.6	57.8	57.9	58.1	58.2	58.4	38
39	58.5	58.7	58.8	59.0	59.1	59.3	59.4	59.6	59.7	59.9	39
40	60.0	60.2	60.3	60.5	60.6	60.8	60.9	61.1	61.2	61.4	40

Dura-Bond Steel Corp
R04-21-18
140 S Ellis Road
Jacksonville, FL

Property of:
U.T. Kearney, Inc.
225 Reinekers La.
Alexandria, VA 22314
(703) 548-4700

Site Visit Conducted by
David Kassel
Phoebe David
Darry Simonson

The paper in this book is made of 50% high grade rag stock with a WATER RESISTING surface sizing.

CONTENTS

PAGE NO.	REFERENCE	DATE

2/1

6/25/92 Thursday 9:05 A.M

Name	Affiliation	Phone No.
Phebe David	A.T. Kearney	703/739-1626
David Kassel	A.T. Kearney	(703) 739-1618
John Elrod	Missimer	904-448-6400
Davy Simonson		404/347-3433
Wayne Norris		412-327-0280
Jim Oliveros		904-448-6400
Pamela Fellabaum		904 [illegible]

E: - DB no longer has anything to do w/ facil.

N: - leased out since 3/1/92

E: Fla. Steel paying for cleanup
- Wayne told him Rad received confirm. from Fl Steel re: cleanup
- have had reps onsite

9:14
E: (hands out information needs answer sheets)
- much of it may have come from Closure Permit
(hands out maps)

9:16. (Jim Oliveros Arrives)

E: All underground tanks removed in 1989

O: at time removed DER did authority

- no req't @ time to sample
- high ~~methylene~~ methane from nearby floating oil fac.

O. may have been former rice paddies

E: plan from '55 showing Fl Steel
- also have deed showing Bushnell

- at one time was artesian well
- used for irrigation of orange crop

N. was well in middle of bldg. where big cement slab is

O: never used by DB

- Univ. N. Fl has fire maps

9:21 Pueblo Asks Q's

2/4

E: office refuse to BFI
- haz. waste to Chem. Can

N: recycled some solvents - had drum master
- distilled it

N: would accum. spent solvent
- reusable
- used for thinner
- could consolidate many
- recycled what could

E: 3-5 drums a month
- depending on jobs coming thru
- bought reclaimer
- used cleaning waste as thinner
- only waste was paint that had settled to bottom

- some sandblast used as backfill in marshy area
- material fell to ground - every new

2/5

: then was graded

N: never blasted already painted steel

- never used lead primer paint

E: metal grit + shot used to clean steel - recycled + sold

N: Sold to Assd Iron + Metal (became Chatham)

E: Biennial never been required

- most recent aerial photo - '85

C: Reichold - not sure what it makes

N: Buff. Tank - ~~mfrs~~ mfrs. tanks → DB paints them
- prime it
- sometimes paint inside
- coal tar on outside sometimes (STI P3)
- cathodic protection

2/6

E: Storage areas have been removed by Balf. Beatty

- concrete pad paved in western part of facility

O: 6/19 - soil borings done, OVA work

E: high OVA rdgs found in Paint can exc. area
- unlabeled, unknown cans

O: Fr Steel recognized it as red lead primer that had used for DOT work

E: apparently next to old paint shed of Fr Sti's
- area prone to washout
- area cans found = washout area

- could see in same intervals old railroad ties

2/7

- perhaps used as backfill area to prevent easy washouts

- no apparent staining or org.

O: Soil around it contaminated w/ VOCs

- took immediate samples of soil
- soil saturated, surrounding cans

E: also took sample of liquid that was result of can runoff

- covered 3½ - 4 gal of mostly product w/ some water

- containerized, owned & used sorbents also

- next morning any leaking cans were containerized

- 5 gal. drums

2/8

- contaminated soil covered w/ vis clean

E (shows permits) 7/16/91

10:02 Paul Fellabaum arrives
- break to get ready for tour

10:15 Begin fac. Tour

Warehouse (NE corner) - unload steel - lift operation

· north driveway if had to be painted only

- cutting/welding through South + bring it towards north

2/9

· main warehouse

· wheelabrator inside

· Steel brought in from north side

F: concrete ramp, lack of vegetation unknown cause ~~of~~ DW
(photo F in State inspection)

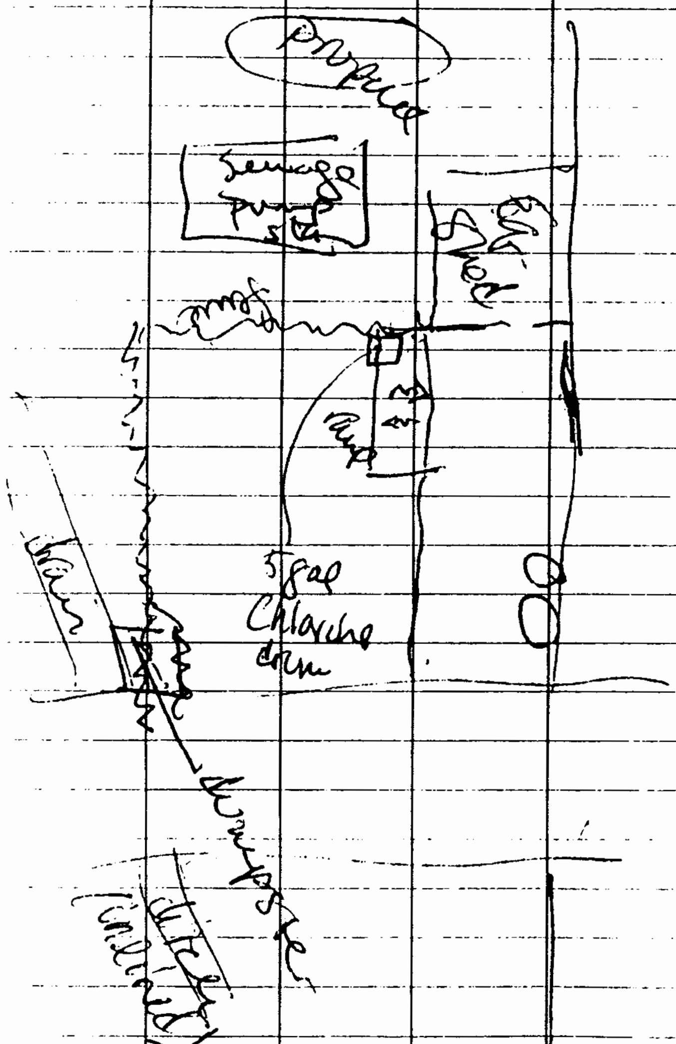
· equipment shed adjacent to east side of main bldg., South of north drivethrough

- waste oil (1) + kerosene drum (1)
- 55 gal stored on cement ~~area~~ pad (10' x 30')
- automotive batteries ~~(4)~~ DW (5)
- scrap metal pieces (machinery parts)

- runoff to drainage ditch

· Propane gas tank South of shed.

2/10



2/11

drain ditch (1 - 1½' deep)

N. had injection well by went on city system

ditch piping put in very recently

East side of main bldg north of W drivethrough

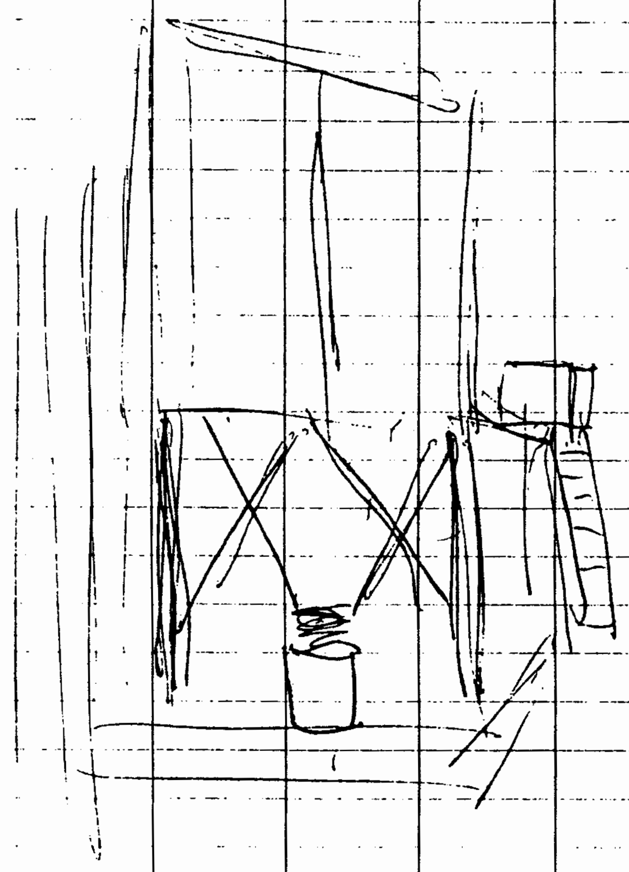
- visible wheelabrator dust on surface all along ground

22 drums (55 gal.) of "shot blast" residue - 1 in process of being filled.

- baghouse ~~35~~ 30 ft high

- all drums sealed w/ plastic sheeting + tape

2/12



Dust Collector

2/13

- drainage ditch gradually tapers to level ground

- blackish clay dust all around drums + cement pad under dust collector

- shot blast in drums sold for recycling

- dust collected in baghouse

= steel storage area north of main bldg

one battery + some scrap in area

2/14

- former diesel fuel tank (white)

  - dark stains on ground, some dead plants on west side of it

- temp waste storage area on cement pads

- paints/sludge - paint waste
  - some epoxy; some oil-based

N. drums filled up w/ sludge → shipped off via Chem. Con.

- used xylene abt. '88

- notif.d '88 of Haz. Wast
  - declared F003 (xylene)

- sometimes had old paint that wasn't inventory → disposed

2/15

- stored between 2 to 20 drums
  - 1 drum/mo. generated

- pad now stores 2 welders

- another pad near abutment corner

- pads bordered by soil - mixed w/ dust (black) - pads lined w/ steel

misrepresentation on map of temp haz. waste stor. area - close to drivethrough

- Photo: D - abutment S. of N. Drivethrough - drums stored on ledge

- no determination of haz. waste before drums brought over to this area

2/16

SWMU #2 - near GW well #7

N: would cut tops off drums when empty

F. had drums of MEK

area in photo D now tire pile

→ in area marked "Current H w/w Stor Area

~~10'~~ 15' × 40'

- accum. area on S. side of stor. Area
  - paint sludge
- cement pad stained in this area

2/17

- distiller could distill 5-6 gal/hr. in this area

- N. area could store solvent produced -
  - trucks would unload at dbl door

- no diking, retaining lips
  - same gaps between sheeting of walls + cement pad

- very oily soil on ledge + below - darkly stained where drums had been stacked in photo D (of 10/90 inspection)

- very dark oily soil around perimeter of Hw/w Stor Area
  - standing water
  - storm drain 30' S + 10' W of H w/w Stor Area

2/18

- drums along west side
  - rusting

SWMU # 1

- cement slab w/ iron shed
- now contains gas tanks
  - compressed O_2 + CO_2
- where washed out equip.
  - areas w/o vegetation

GW monitor. well # 6
- inside main bldg. north of SWMU 1

GW mon. well # 5
- inside main bldg south of SWMU 1

- traces of reddish paint where equip. + guns sprayed out
- walls punctured or pulled back where paint sprayed through

2/19

- blue shed now gone - photo F
- other shed - photo G
  - removed March 6, 1992

- used to be an old corrugated shed when DB first got there near the fence line

- dark, brownish red dirt road along western fence line

- construction debris in pile along fence

W. road been like this since DB's been there

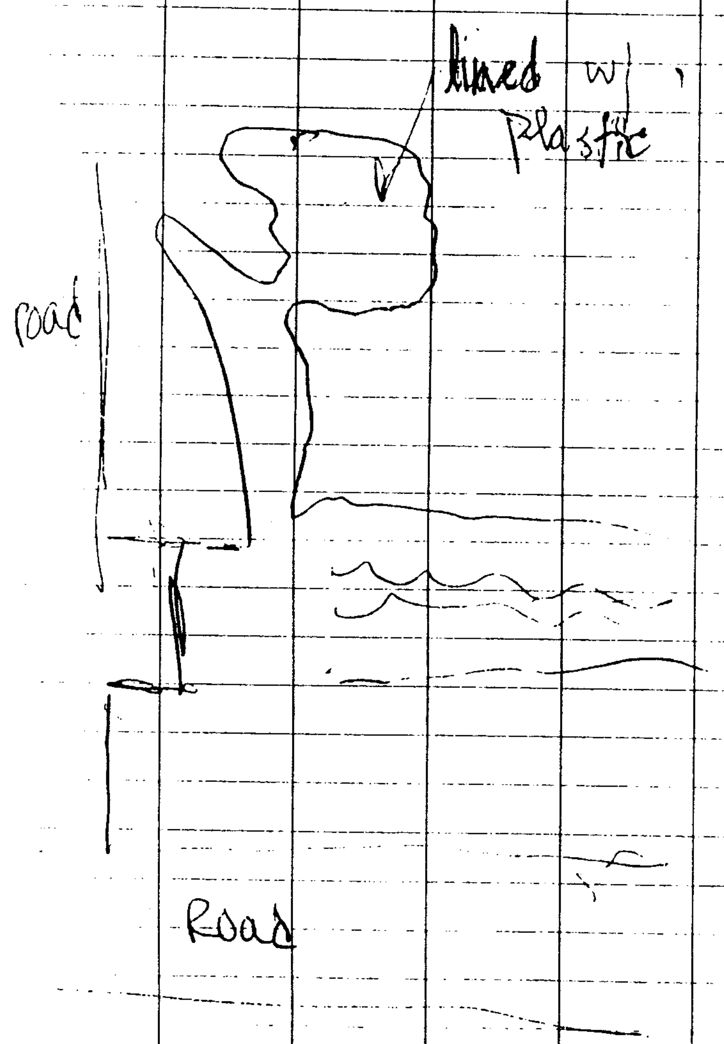
Paint can excavation area on S side of fac.
- adjacent to S. Drain. ditch

- ditch about 15' deep
- very shallow water - Fairly c'

OK

2/20

- excavation pit:



2/21

- about 10' deep

- preliminary segregation in far SW corner on plastic liner

- high OVA soil under plastic in SW corner, closer to gate
double Visclean liner
ethyl benz. Xyl., mineral spirits

- very orig. "hot" dirt mixed in w/ tiles

- misspoken
performed 8240s + RCRA tests on material
540,000 ppm lead

- ~~Plast~~ *

→ clean dirt in pile in far corner based on OVA Nos + visible
not lined
15-20' in diameter 9' high

2/22

- double lined underneath pile + top liner
  - 30' x 30' - 9' high
- pile of construct. debris
  - 20' diam 9' high
  - from general area near gate

2/23

- compressor area
  - on inspection PE had noticed leak of oil running NE-SW
  - barrel of "oil-dry" on ledge south
- drain ditch South of compressors area very turbid
  - deep brown w/ patches of brownish foam
- N: never used either of 2 buildgs in SE corner of facility
  - one in farthest SE corner
    - used to house FL Steel's erection equip.
  - east of main bdg. - former above gd. stor. tank
    - storm drain (clogged) adjacent to east of it
  - drain ditch just to the west

2/21

- South drivethrough now blocked off by chain-link fence

- highly turbid brown water in drain. ditch
  - very shallow
  - very little noticeable flow

- ditch between office + South drive through - not as well defined as in points north

=

former waste oil tank was located in between 2 bldgs in SE corner
- closer to westernmost of the 2 bldgs

- now a scrap tire pile w/ some scrap fencing

12:20 2/05

- Open lot located directly across Ellis Rd. from South drivethrough + lot entrance

=

Two new driveways from South into the fac.

Culvert outfall into drainage ditch along Highway five
- a few rocks have reddish tint near water level
- reddish hue under water on rocks → red dirt

- Old culvert base near eastern southern driveway

2/26

- general debris pile ~~North~~ North of SW corner contains some drum scraps & crushed drums

- Scrap 5' tank - used oil
- WN did not know origin or owner

- outside sand blaster
  - west of main bldg by abt 100+'

- material used as fill in area immediately surrounding blaster and area near baghouse, east of building

- 27 barrels labeled "Shot Dust" north of outdoor blaster
  - northwest of that, 20' long 10' high pile of greyish residue - sandblast (outside residue)

2/27

- 3 of the drums (gray ones) labeled w/ "Shot dust 6/24/92"

- 1 barrel labeled "Paint Waste"
N, - might contain hardened paint

- storm drain grate W. of main bldg is very recent

- some crushed barrels in waste (55 gal.)
piles - small piles - along western fence

- MW-1 near north side just South of railroad abutment

- ~~Write~~ fuel oil tank near temp/HW stor. area installed in 1991

2/28

Main Bldg.

- Materials brought in through North side
- finished, cut
  - is in Wheelabrator
- coating/painting
- exit pipe to city sewer from Wheelabrator rinse 20' north of north drive through

Paint residue on concrete pads of painting/coating area

old barrel w/ label indicating
D001
F005
D035
UN1263

1:40 P.M. 1340 2/07

Lunch Break

3:00 1500

Other info needs meeting
Waste Mgt Practices

Sanitary: City Sewer

General Facility Refuse
Paper → dumpster
BFI →

Used/Unused Paint:
Chem. Con

Construction Debris:
- have ~~that~~ concrete recycler tried to have come out – never showed up
- some of scrap sent to Chatham

2/30

- Scrap → Scrap bin → taken to Chatham

Used Oil - never used UST
- stored in drums → picked up by Holloway - recycler
Oil Company of TX

Used tires
- trucking co. - Great Amer. Western left them behind
- accumulating since DB operated

Frequency of Paint Gun Cleaning
- if sprayed using paint that only MEK could clean out → daily

E: - after use - use paint/solvent mixture again ~~to clean~~ as a paint additive

Two areas used for fill from outside sand blast area →

2/31

1) along east side of main bldg near wheelabrator baghouse
2) around outside blaster area
- graded as it accumulated

WN: DB doesn't blast off old coatings
neither does BB

Balfour Beatty - not doing any coating
- constructing painting facility

2/32

Example process:

By rail: rec'd by tracks
start south → north
by truck

normal flow:

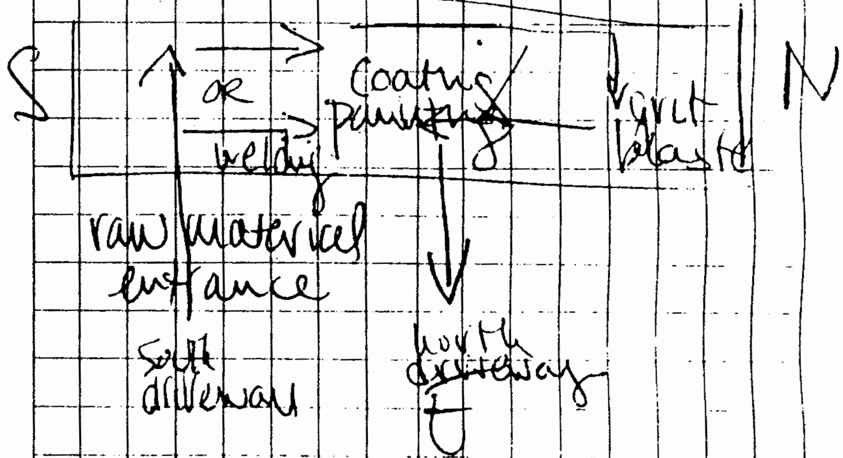
Start south → north
- finished after Wheelabrator - coating
- burning tables were in south end
north to south

2/33

- fabrication of smaller angles along W. wall
- ripping of flanges
- splicing

welding along E. wall

MAIN BLDG DIAGRAM N



- if came in by rail & just needed finishing → rail car N → S & just grit blast the material

2/34

- could also move materials via overhead cranes N → S off of rails

- 20' x 10' grid around paint can excavation area

- @ 3' 6' + 9'

Artesian well - located in ctr. of main bldg.

There were 3 above, 3 below ground tanks + the 1 'white tank'

WN: 4:49 1649 2/35

- used to be an old street (Cynthia St) where western site boundary is

- evidence of an outfall discharge equal to midway point of main bldg.
- discharges onto Chatham Steel Property

1655 2 previously unnoticed 55 gal drums
- badly distorted
- blue one reads "Dirty Thinner" on palette w/ 2 5 gal cans.
- 20' from construction debris pile
- adjacent to black 55 gal. drums

2/36

- between segregated dirt pile & construction debris pile in SW corner → Storm sewer drain

- much washed out soil around it

- evidence of surface water runoff from vicinity of "hot" pile

JE: Excavated Cans
- scoped up liquid from water ~~in drain ditch~~ in excavation hole
- recontain'd leaking cans

4/8 Discovery
4/9 containerized leaking cans

Soil piles + drums created + filled about 6/11

2/37

TASK Environmental
Tampa, FL
- conducting paint can removal

CLOSEOUT MTG 1730

Norris
Elrod
~~Dav~~ Simonson
David
Kassel

VSI Completes 1840

David, Kassel, Simonson search drain. ditch on Highway Avenue for storm water outfall

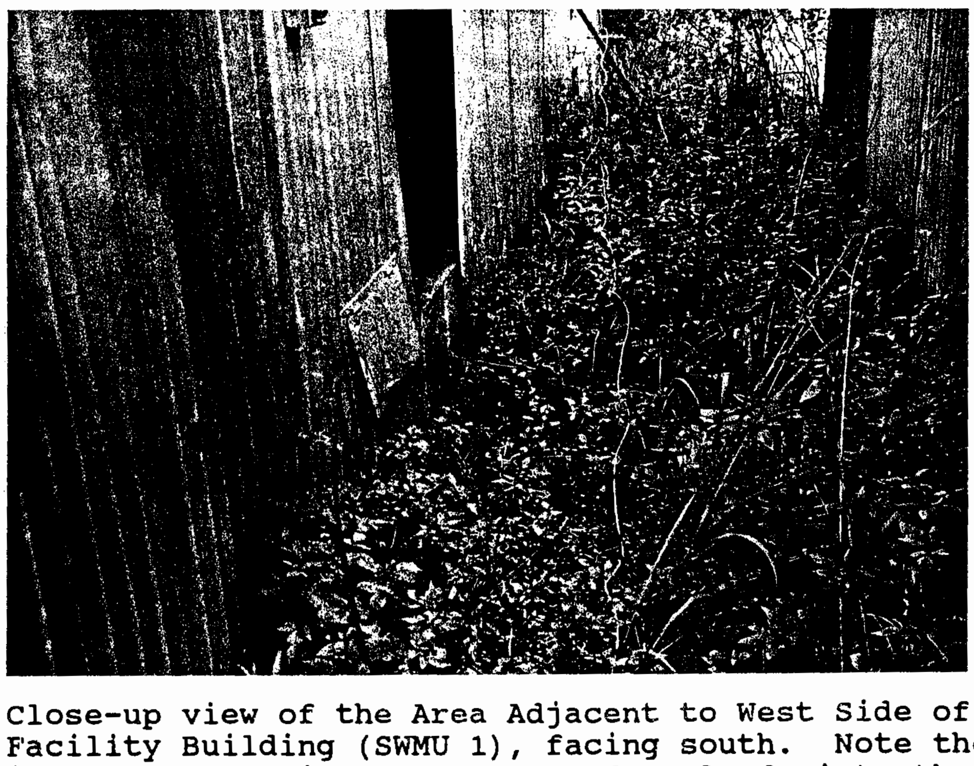
Leave facility 1900

APPENDIX B

PHOTOGRAPHIC LOG

The roll number and photograph number of each photograph are provided at the end of each legend to cross-reference the Photographic Log to the VSI Log Book in which the sequence of photographs was recorded (i.e., 1-2 refers to Roll Number 1, Photograph Number 2).

1.1 Location of the Area Adjacent to West Side of Main Facility Building (SWMU 1), facing south. The unit is located where the vegetation is growing. (1-20)

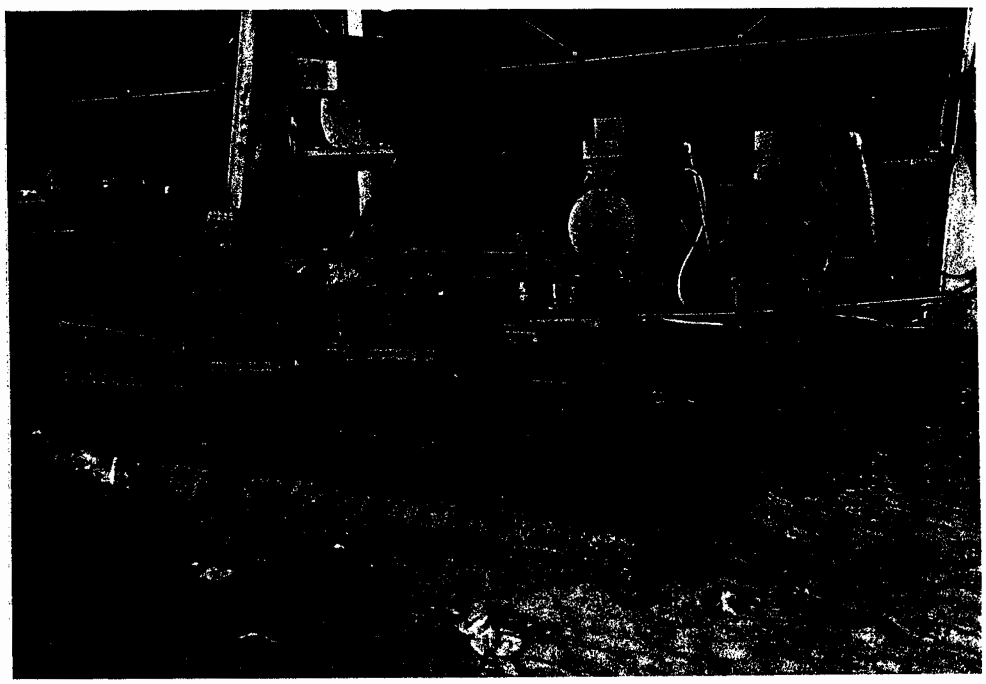


1.2 Close-up view of the Area Adjacent to West Side of Main Facility Building (SWMU 1), facing south. Note the area is grown over with weeds. The door leads into the main facility building. Reportedly, the paint guns were directed out of this door for cleaning. (1-21)

1.3 Close-up view of the Area Adjacent to West Side of Main Facility Building (SWMU 1), facing south. Note there is no evidence of paint residue since the area has been cleaned up. (1-23)

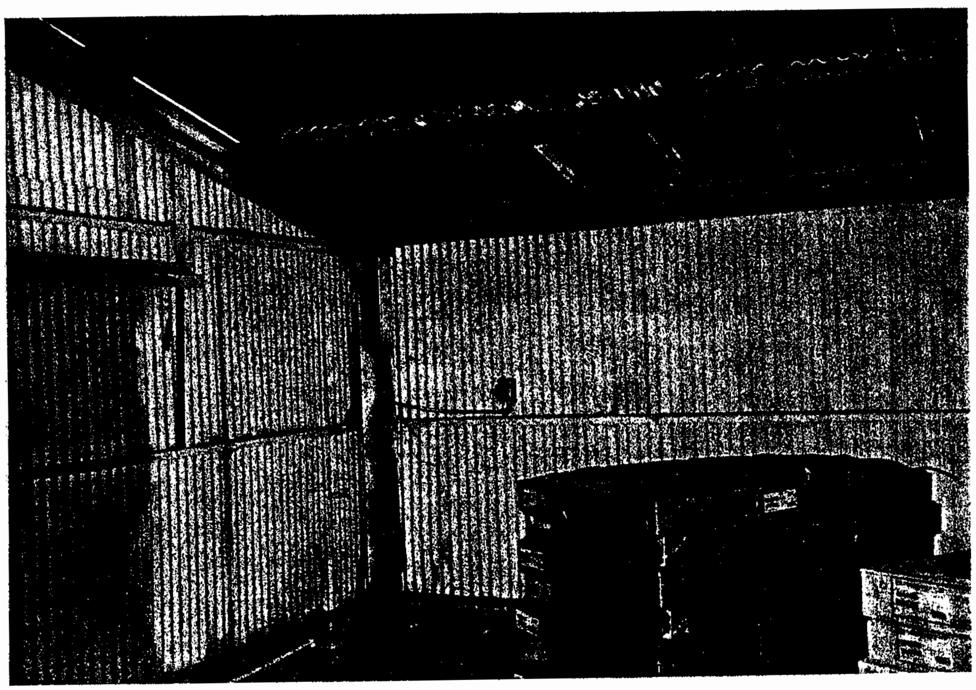
1.4 View from inside the main building at the location where employees allegedly cleaned out their paint guns and directed the waste out the vent hole to the Area Adjacent to West Side of Main Facility Building (SWMU 1). The photograph is taken facing west. (1-24)

2.1 Facing north at the Area Immediately Adjacent to Dumpster (SWMU 2). Note monitoring well No. 7 is located in the foreground. The brown box in the background is the Dumpster (SWMU 22). (1-13)



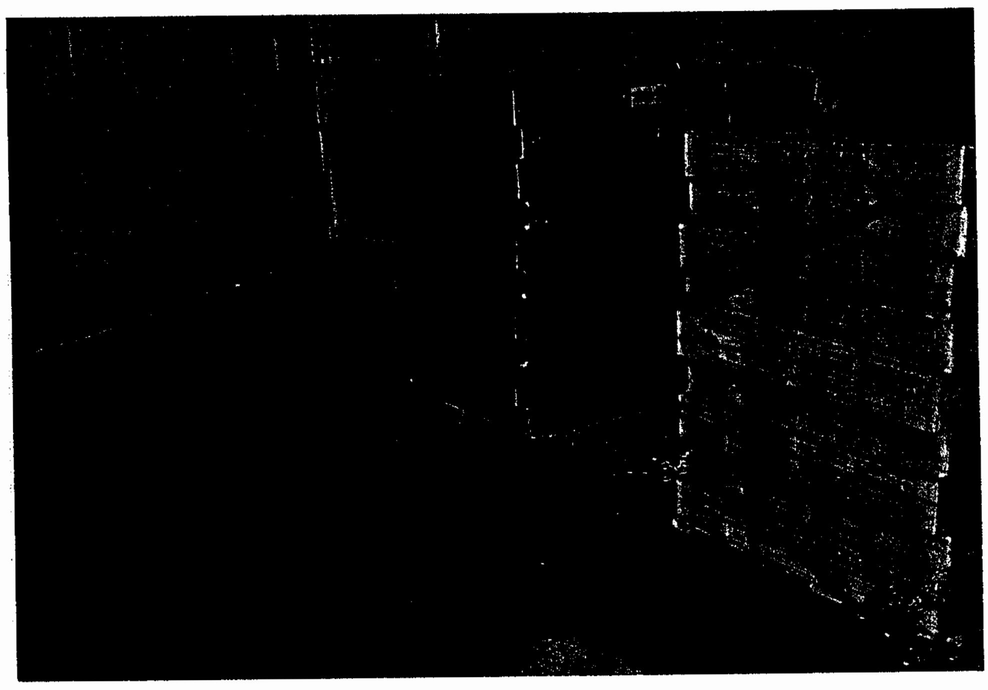
3.1 View of the Temporary Waste Storage Area (SWMU 3), facing east. Note the concrete slab is not curbed and soil abuts the slab. (1-10)

3.2 Close-up view of broken bags of Black Beauty™, located on the north side of the Temporary Waste Storage Area (SWMU 3), facing north. The bags are positioned on dirt covered concrete. (1-11)

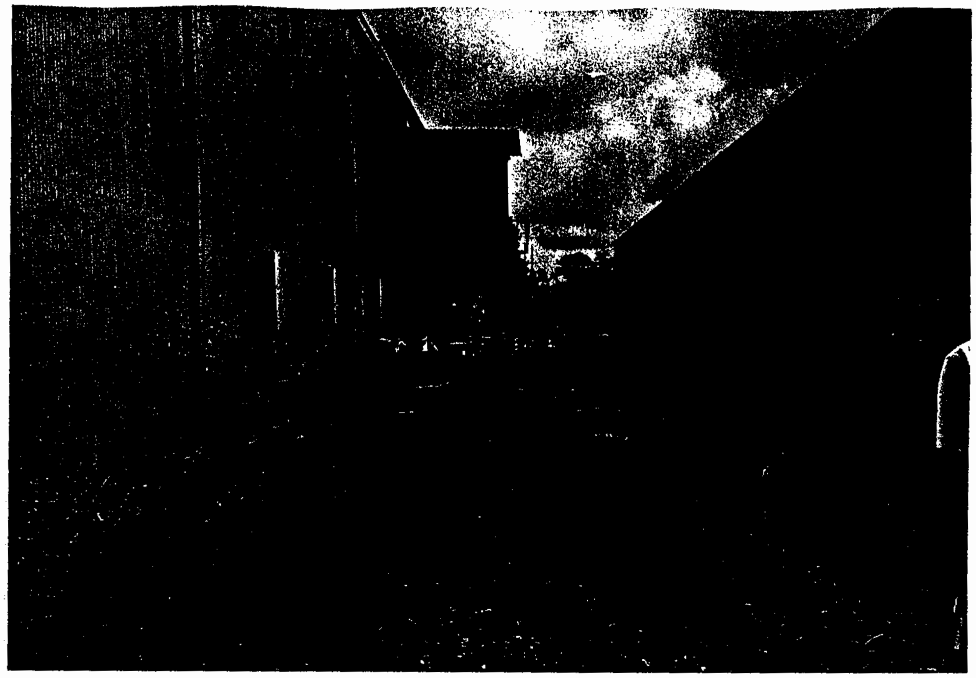


4.1 Hazardous Material/Waste Storage Area (SWMU 4), facing west. A solvent recovery unit was formerly located in the corner. Note that the pad is not curbed or diked. (1-16)

4.2 Facing northwest at the Hazardous Material/Waste Storage Area (SWMU 4). Note welding rods are now stored in the area. (1-17)



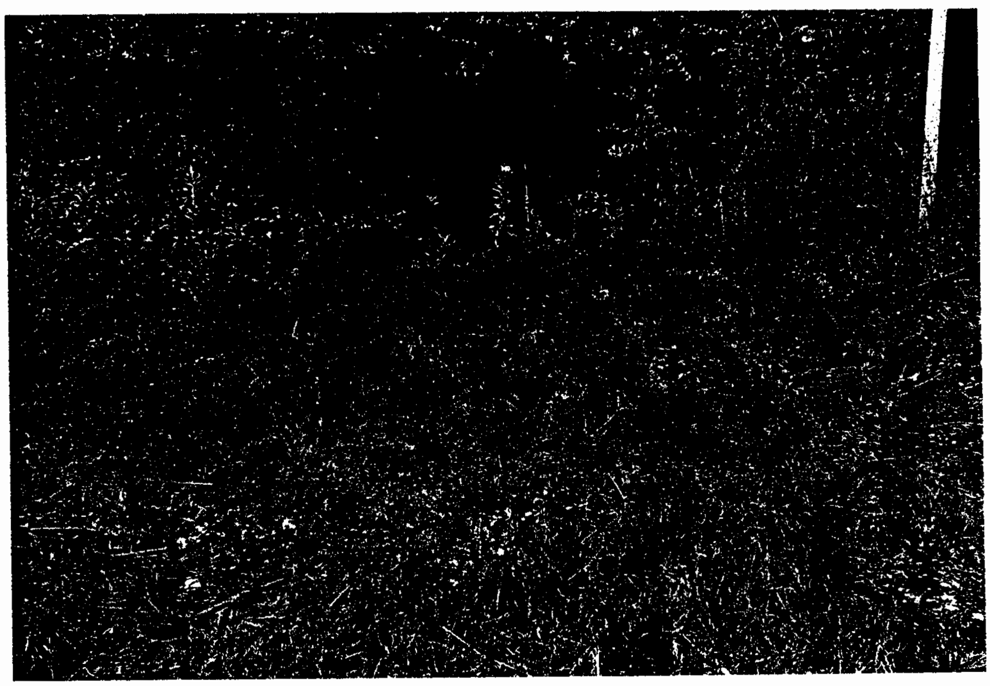
4.3 Close-up of dark stained concrete floor at the Hazardous Material/Waste Storage Area (SWMU 4), facing southwest. (1-18)



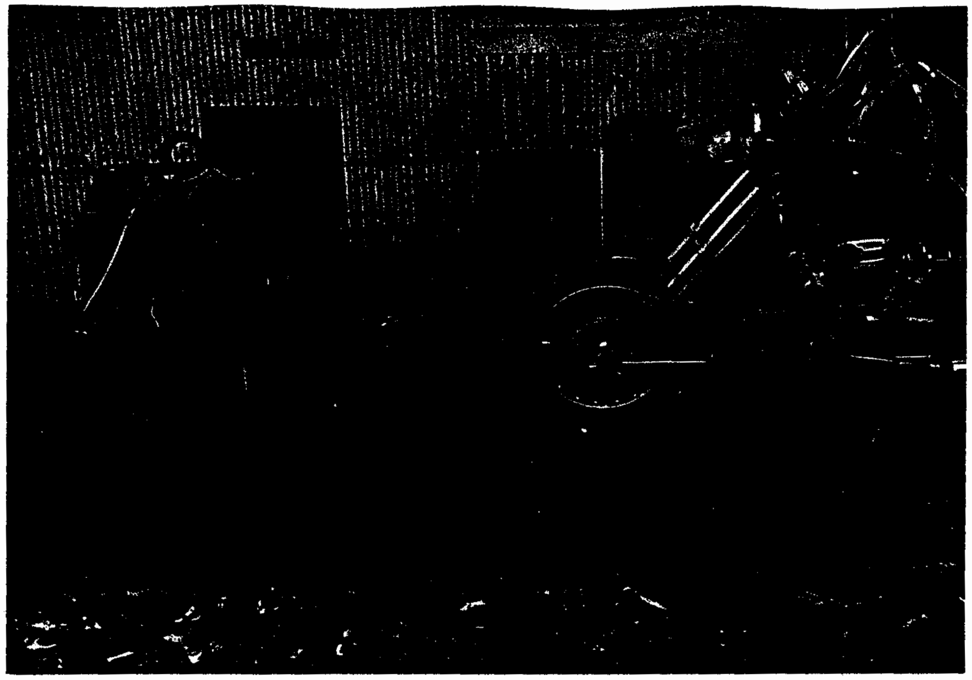
5.1 Facing north towards the Wheelabrator Dust Collector (SWMU 5). Note that the drums contain shot blast dust collected from the collector spout. (1-5)

5.2 Closeup view of the Wheelabrator Dust Collector (SWMU 5) downspout, facing north. The drums contain shot blast dust. Note the soil surrounding the downspout is covered with shot blast dust. (1-6)

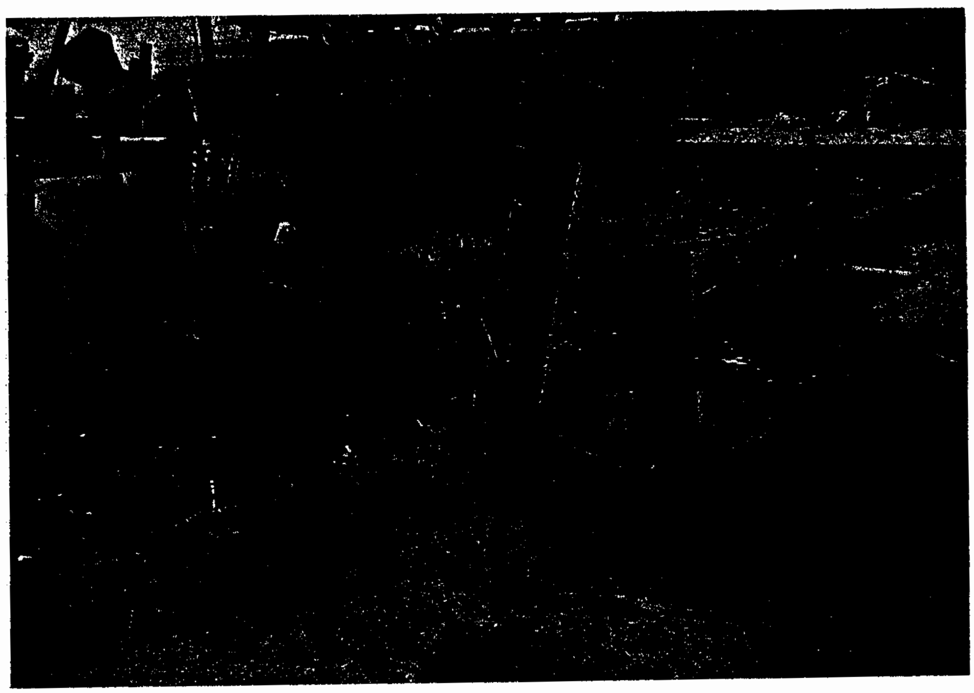
5.3 View of the drums containing shot blast dust from the Wheelabrator Dust Collector (SWMU 5), facing south. Note that the shot blast dust is on the soil surrounding the drums. (1-7)



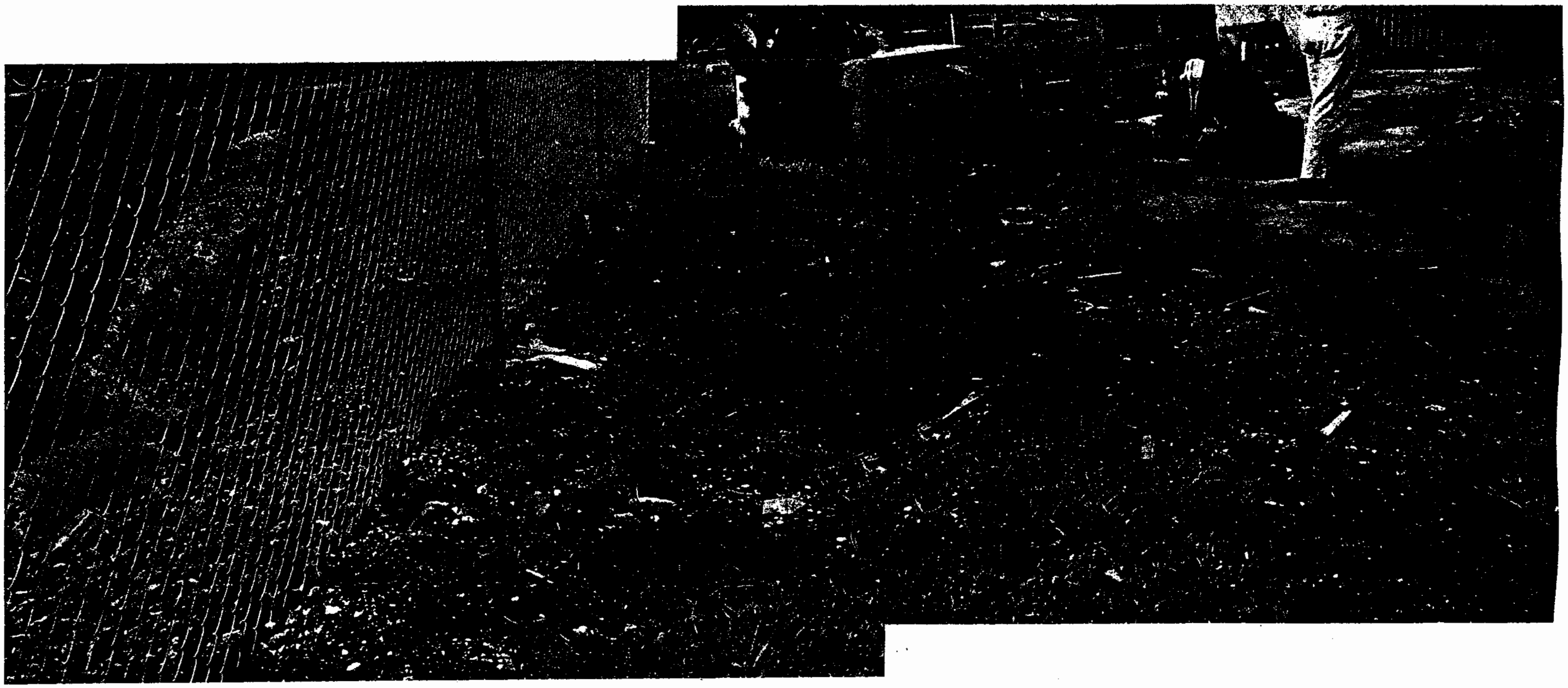
6.1 Location of the former Waste Oil Tank (SWMU 6), facing south. Note that there are no remaining fill or vent pipes. (2-17)



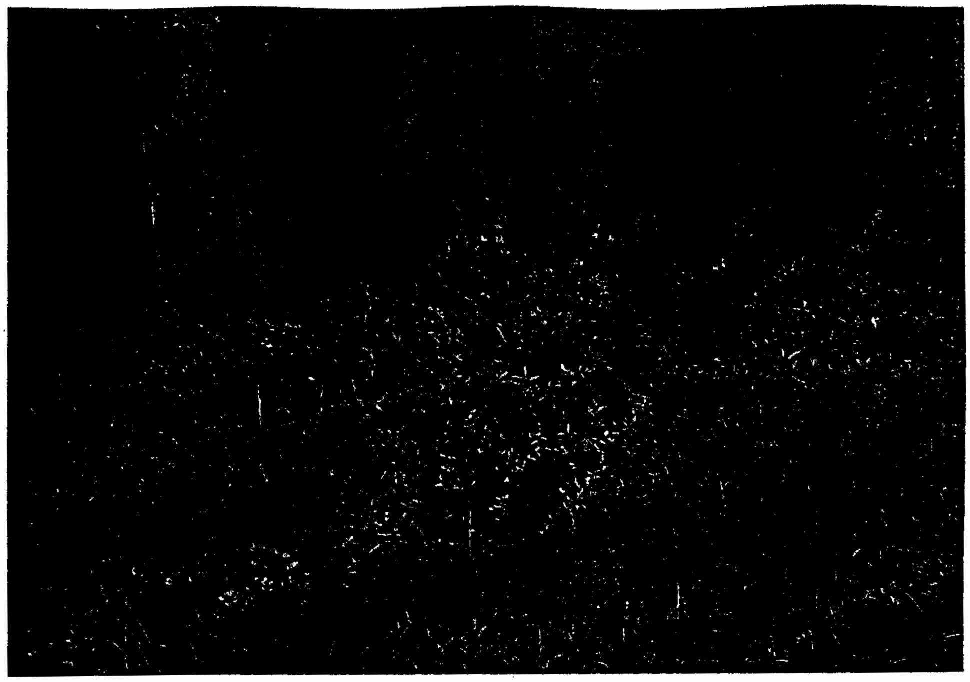
7.1 View of the Ramp Area (SWMU 7), facing west. The drums in the background are labeled waste oil and kerosene. (1-1)



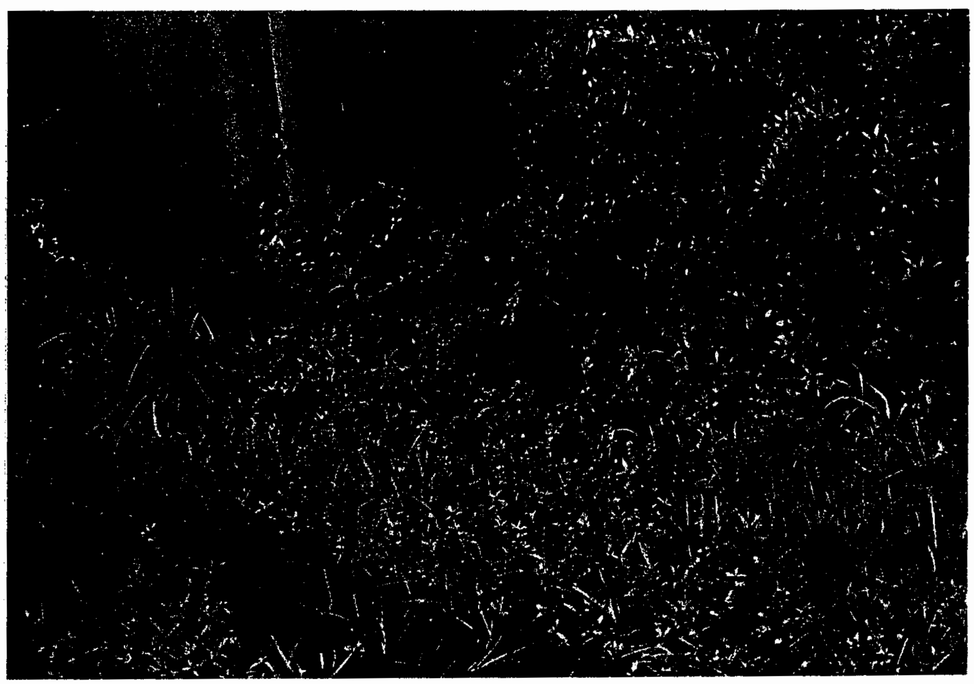
7.2 Facing southeast towards the Drainage Ditch (SWMU 19) from the Ramp Area (SWMU 7). Note that the drainage from the maintenance shop and Ramp Area flows towards the Drainage Ditch (SWMU 19). In addition, this is the location of one of the Underground Storage Tanks (AOC B). (1-2)



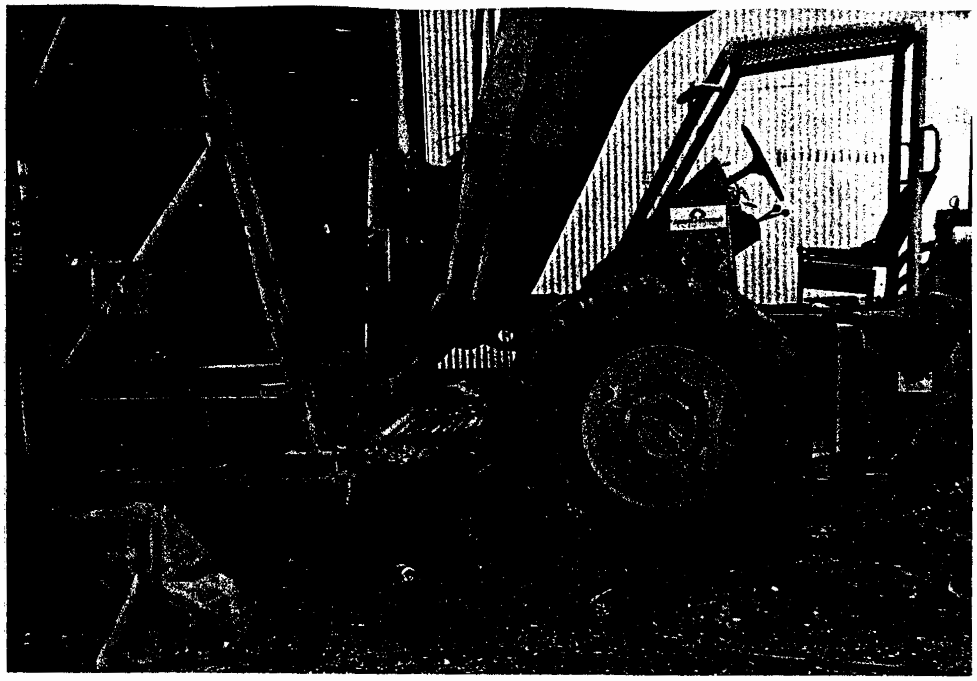
7.3 Panoramic view of the Ramp Area (SWMU 7) and Drainage Ditch (SWMU 19), facing south from the maintenance shop area. (1-3, 1-4)



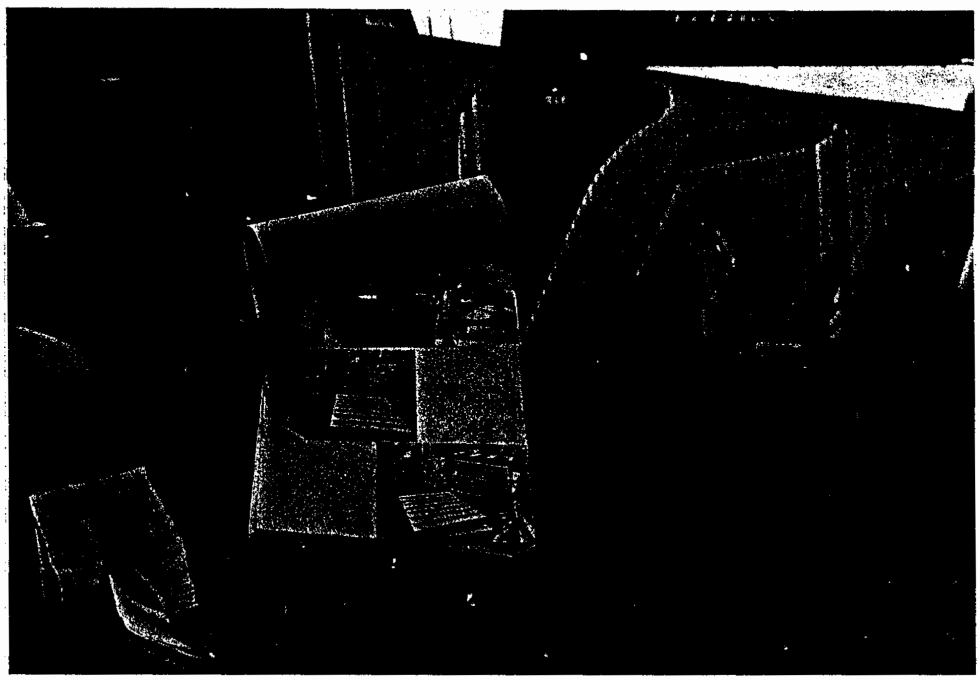
8.1 Close-up of the Sandblast Residue Fill Area (SWMU 8), facing east. Note the dark material within the grassy area is the sandblast residue. (1-8)



8.2 View of the Sandblast Residue Fill Area (SWMU 8), facing east. Note the dark material in the center of the photograph is the sandblast residue. The Drainage Ditch (SWMU 19) is in the foreground to the left. (1-9)



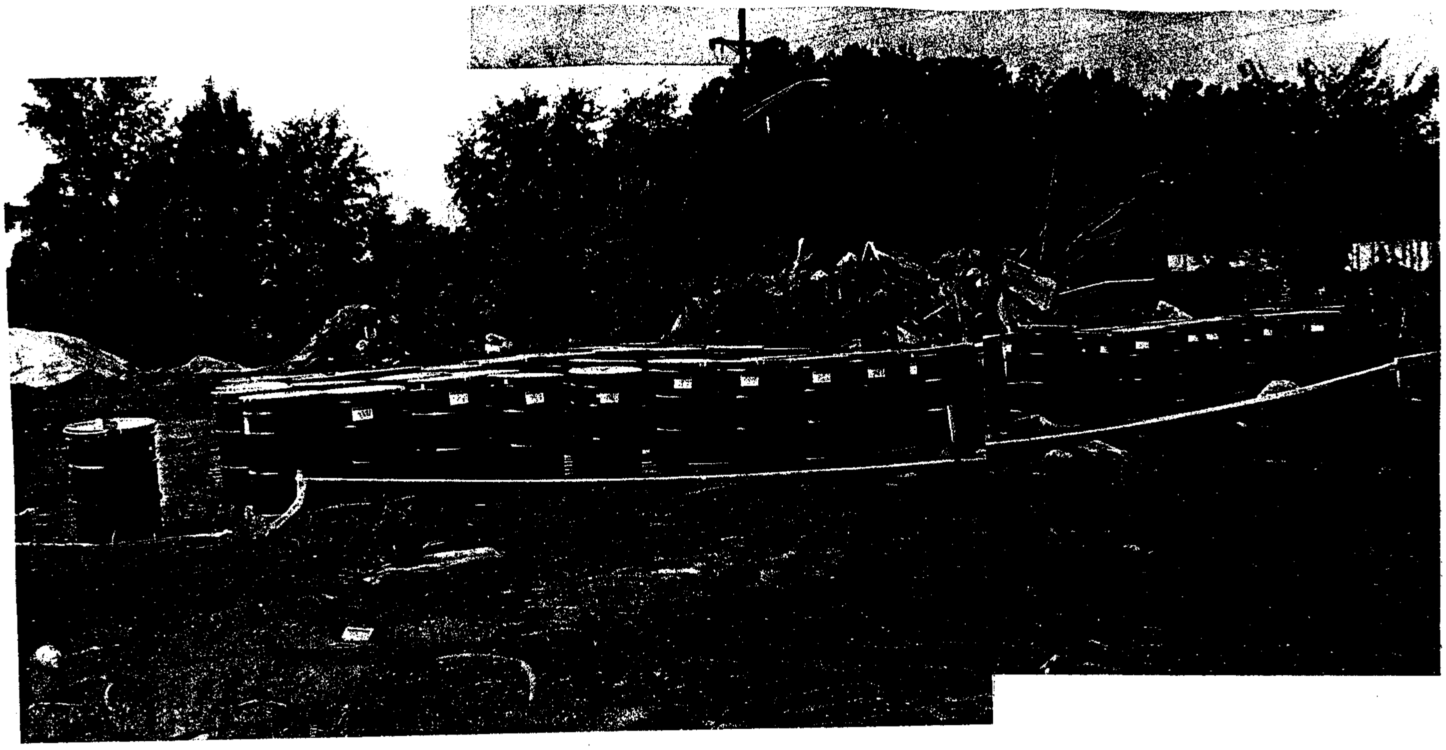
9.1 Facing south towards the Historical Outside Storage Area (SWMU 9). In the past, drums were located where the fork lift is parked. (1-12)



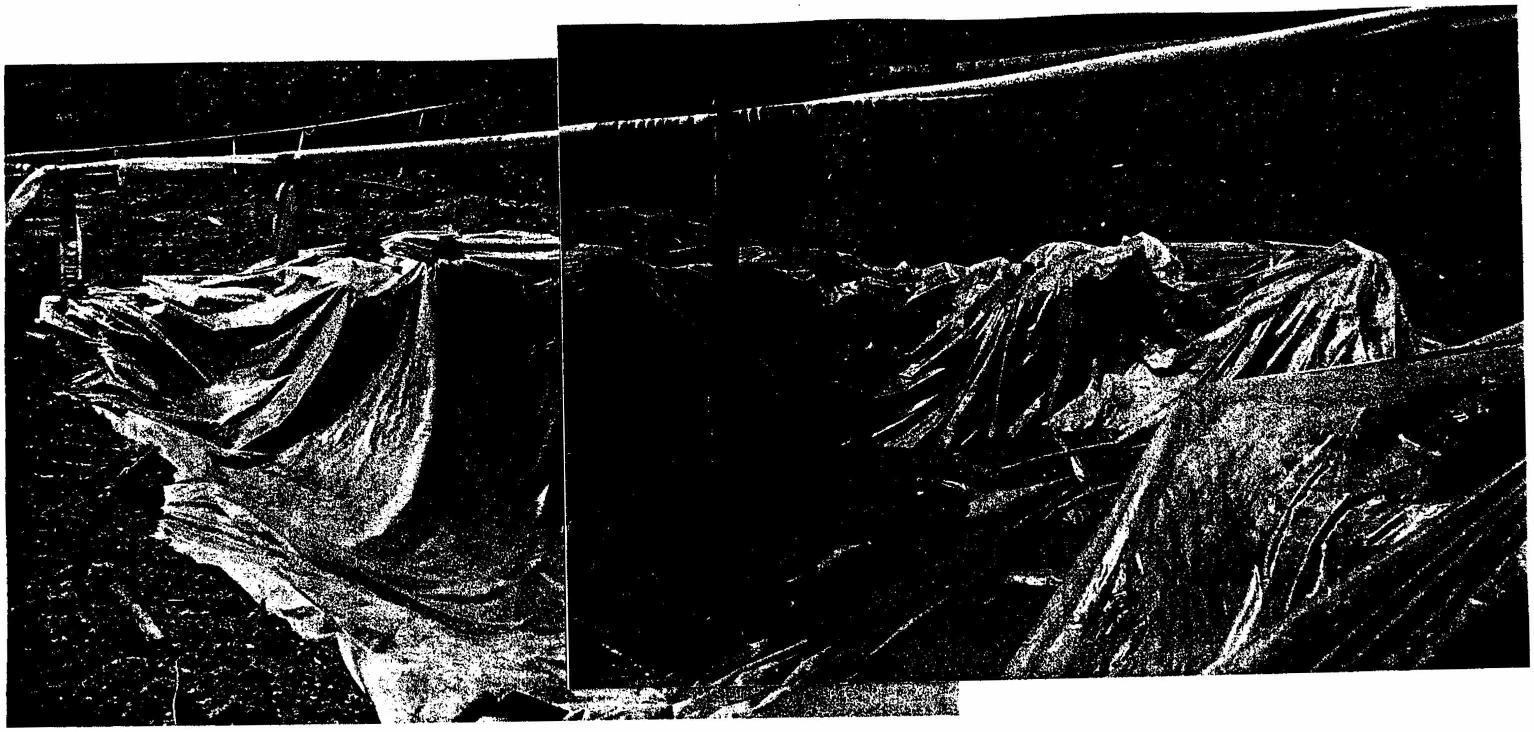
9.2 Photograph showing the former condition of the Historical Outside Storage Area (SWMU 9) as well as the current condition of the area (in the background where the forklift is located), facing south. (1-14)

10.1 Location of the former Blue Shed (SWMU 10) and Sheet Metal Building (SWMU 11) where waste paint cans were historically stored, facing east. Note the area is now covered with a concrete slab for the new painting building. (1-27)

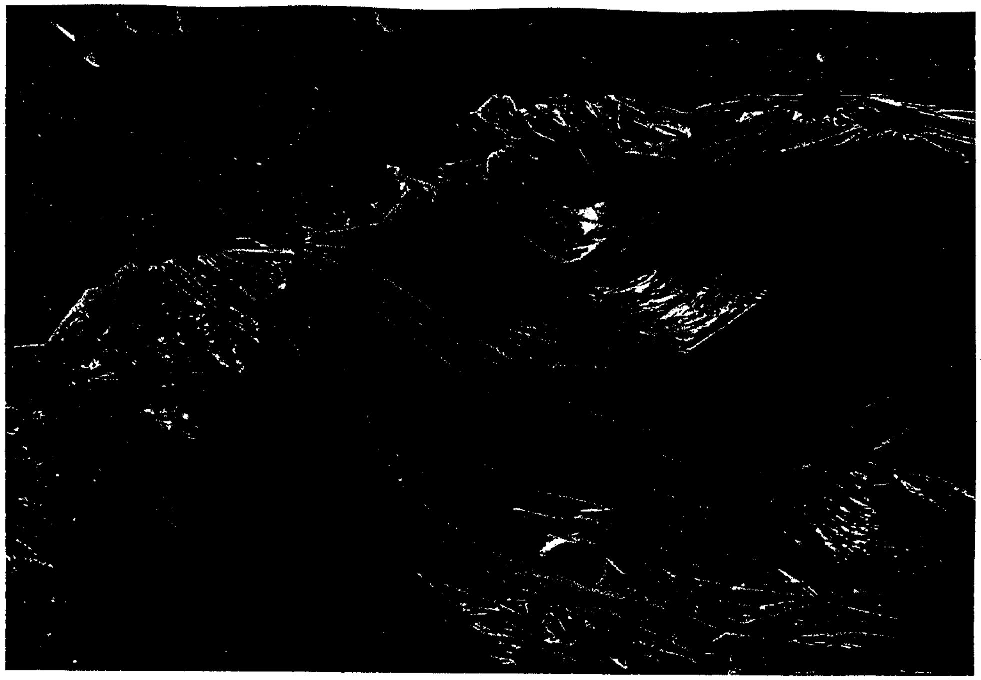
11.1 See 10.1



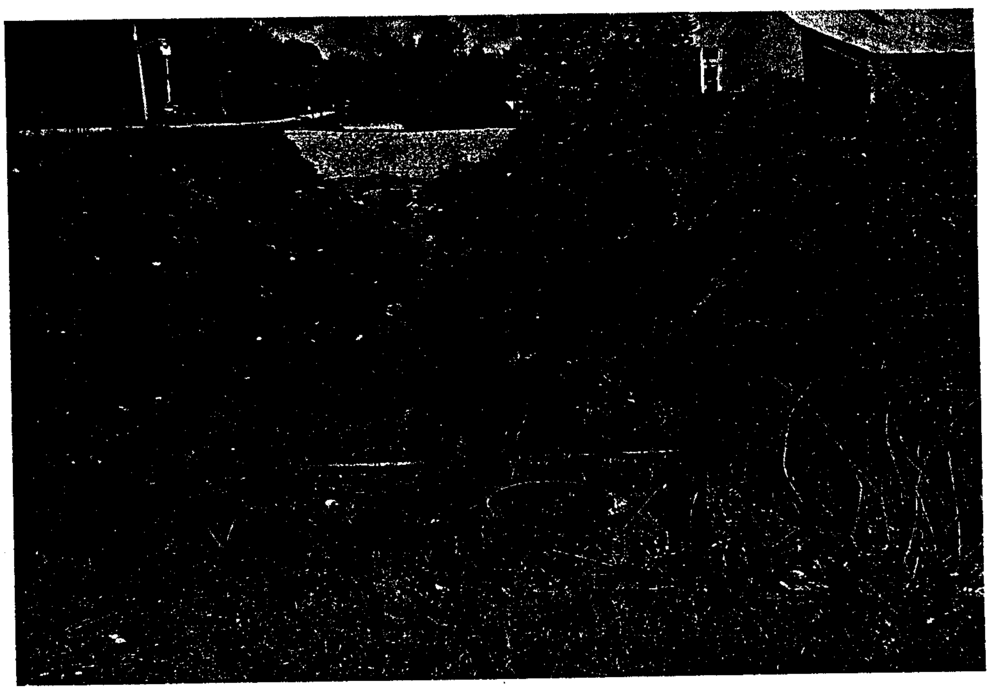
12.1 Overview of the Paint Can Excavation Drum Storage Area (SWMU 20), facing southwest. Note that most of the drums are positioned on wooden pallets. The drums contain visibly contaminated soil from the Paint Cans Excavation Area (SWMU 12). The Construction Debris/Soil Pile (SWMU 21) in the immediate background was created during construction activities for the new painting building. (1-33, 1-34)



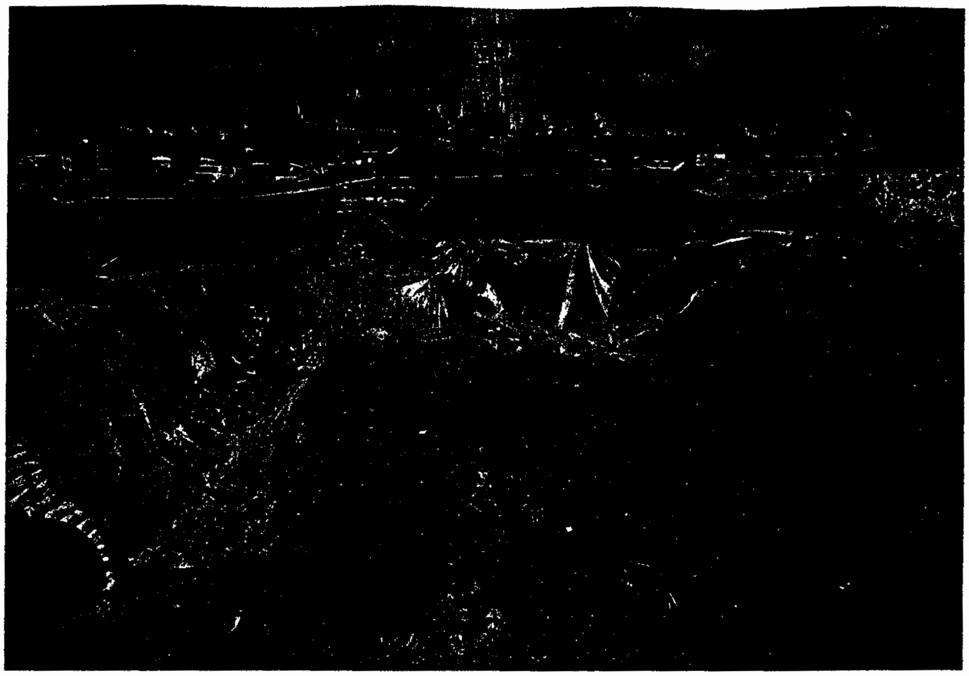
12.2 Close-up view of the Paint Cans Excavation Area (SWMU 12), facing southeast. Note the ponded water is from recent rainfall. (1-35, 1-36)



12.3 Facing northeast at the Paint Cans Excavation Area (SWMU 12). Note the area is covered with sheet plastic to prevent rainwater from entering the excavation. (1-37)

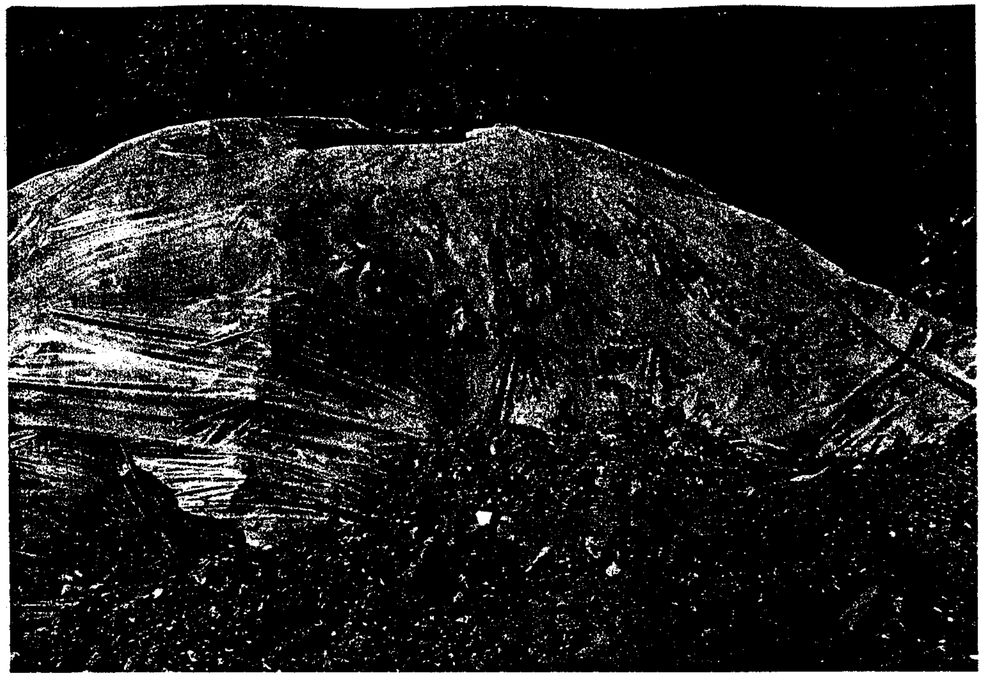


12.4 View of the Highway Avenue drainage ditch located on the south side of the facility, facing west. This ditch receives runoff from the Drainage Ditch (SWMU 19) and the Storm Water System (SWMU 18), as well as runoff from the Paint Cans Excavation Area (SWMU 12). (2-18)



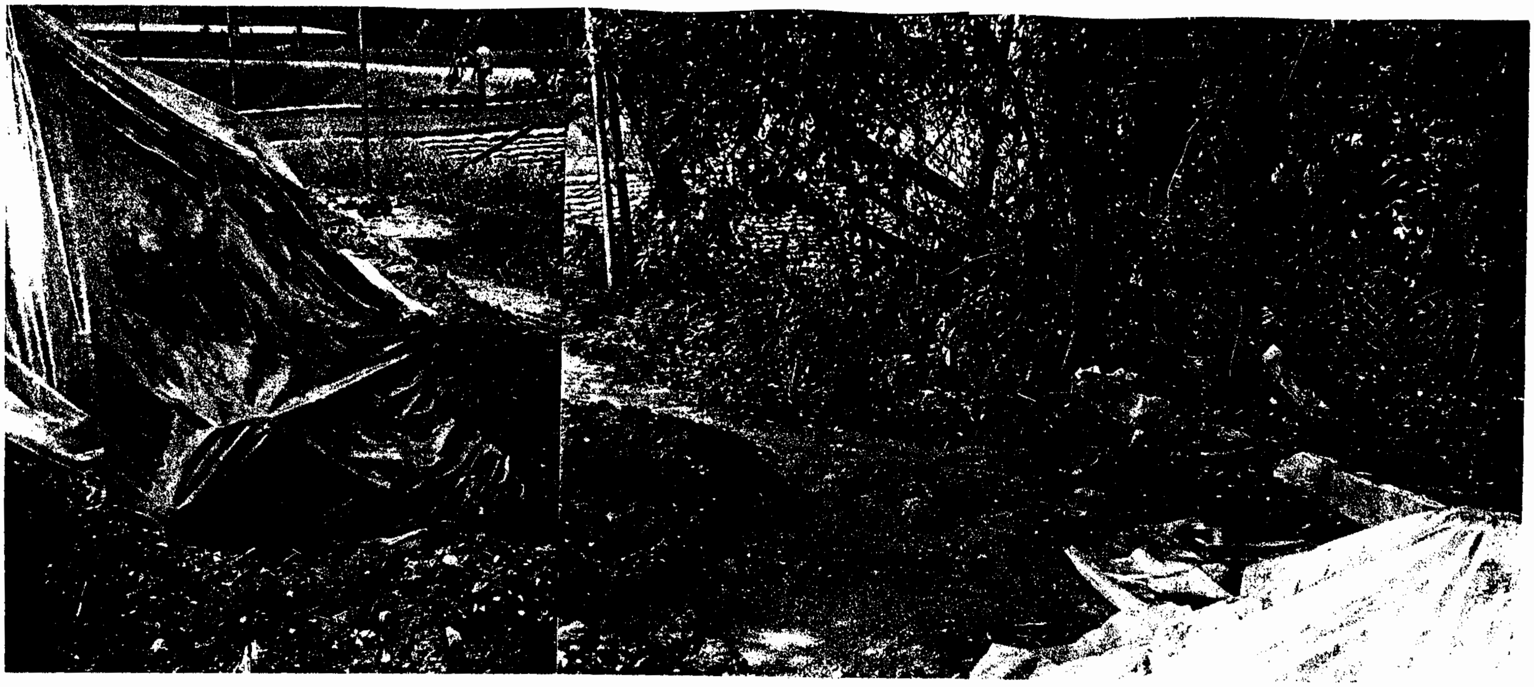
12.5 Overview of the Paint Cans Excavation Area (SWMU 12), facing northwest. Note the Highway Avenue drainage ditch is in the foreground. (2-22)

13.1 Facing south adjacent to the Covered Soil Pile (SWMU 13). Note the drainage ditch along Highway Avenue is in the background. Runoff collects in the bermed area and flows to the Highway Avenue drainage ditch. (2-1)

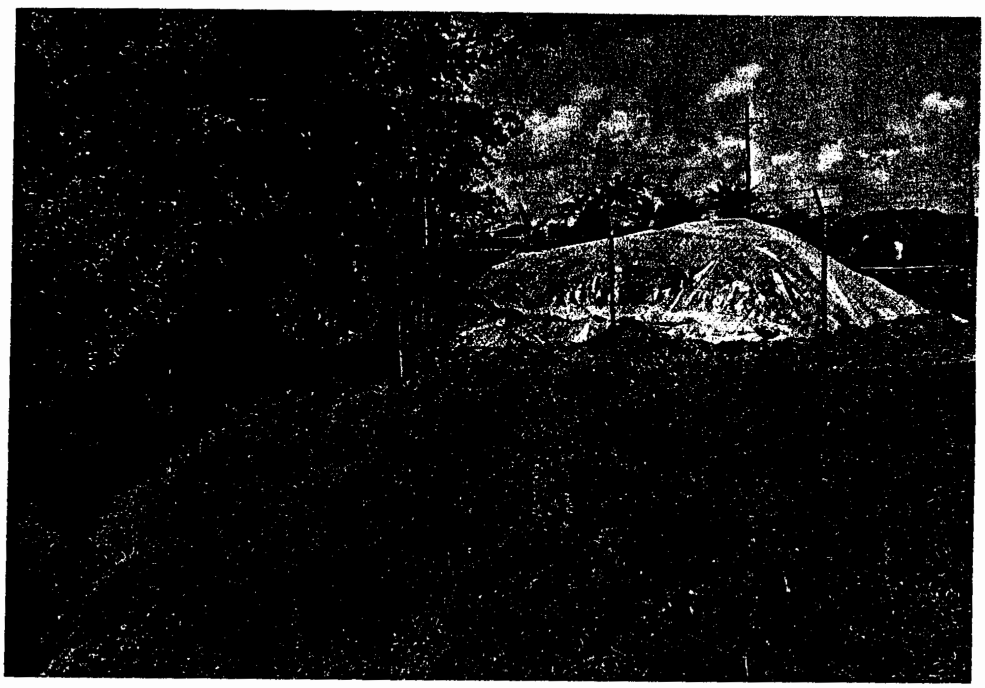


13.2 Facing southwest at the Covered Soil Pile (SWMU 13). (2-2)

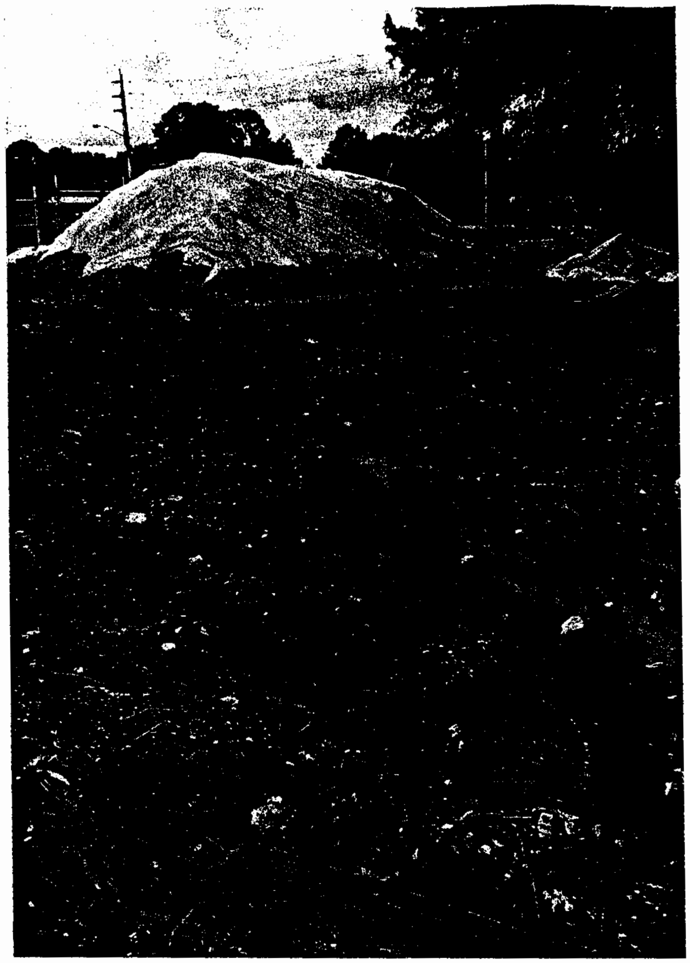
13.3 View of the Covered Soil Pile (SWMU 13) in the foreground and the Uncovered Soil Pile (SWMU 14) in the background, facing southwest. (2-3)



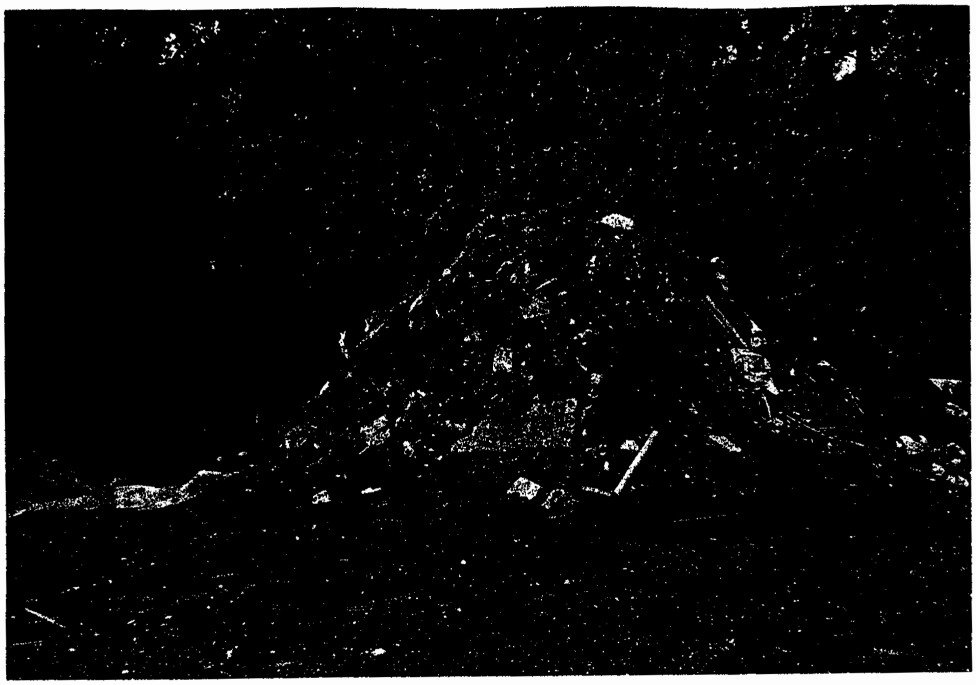
13.4 Panoramic view of the drainage route for the area along the western edge of the Covered Soil Pile (SWMU 13). Note the drainage ditch along Highway Avenue is in the background. (2-5,2-6)



13.5 View of the Covered Soil Pile (SWMU 13), facing northwest from outside of the facility. Note the Highway Avenue drainage ditch is in the left foreground. (2-23)



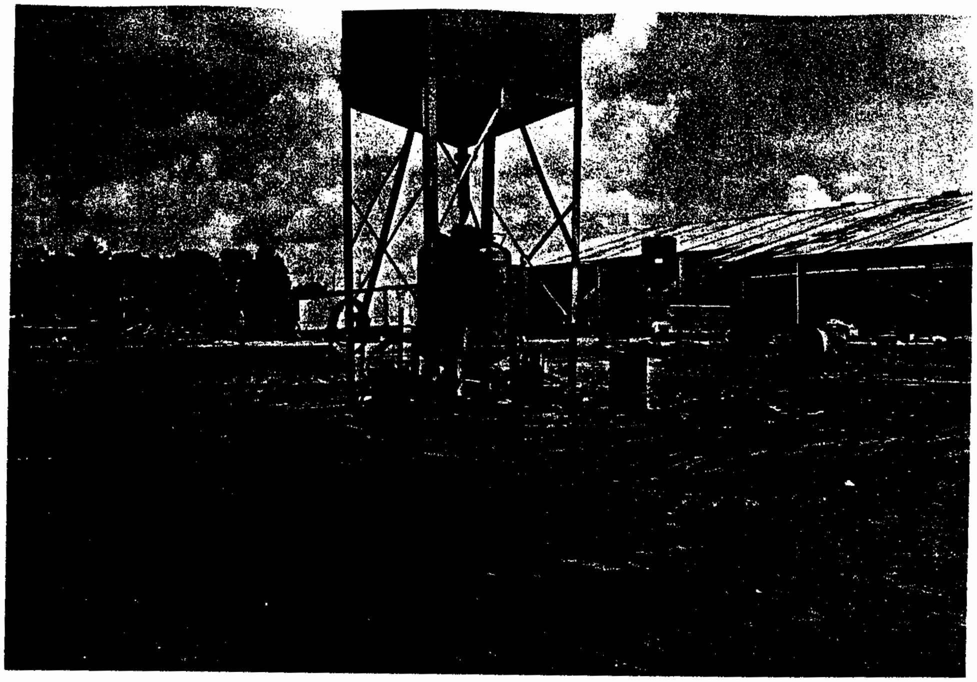
13.6 Overview of the Covered Soil Pile (SWMU 13) in the background, and the Storm Water System (SWMU 18) drain in the foreground, facing southeast. (3-12)



14.1 Overview of the Uncovered Soil Pile (SWMU 14). Note the drainage ditch along Highway Avenue is in the left background. (2-4)

15.1 Shot Blast Dust Drum Storage Area (SWMU 15) surrounding the Sandblast Area (SWMU 16), facing west. Note the drums contain shot blast dust and one drum, labeled paint waste, actually was storing construction rubble. (2-29)

16.1 Overview of the Sandblast Area (SWMU 16), facing northwest, with the drums of shot blast dust in the foreground. (2-30)



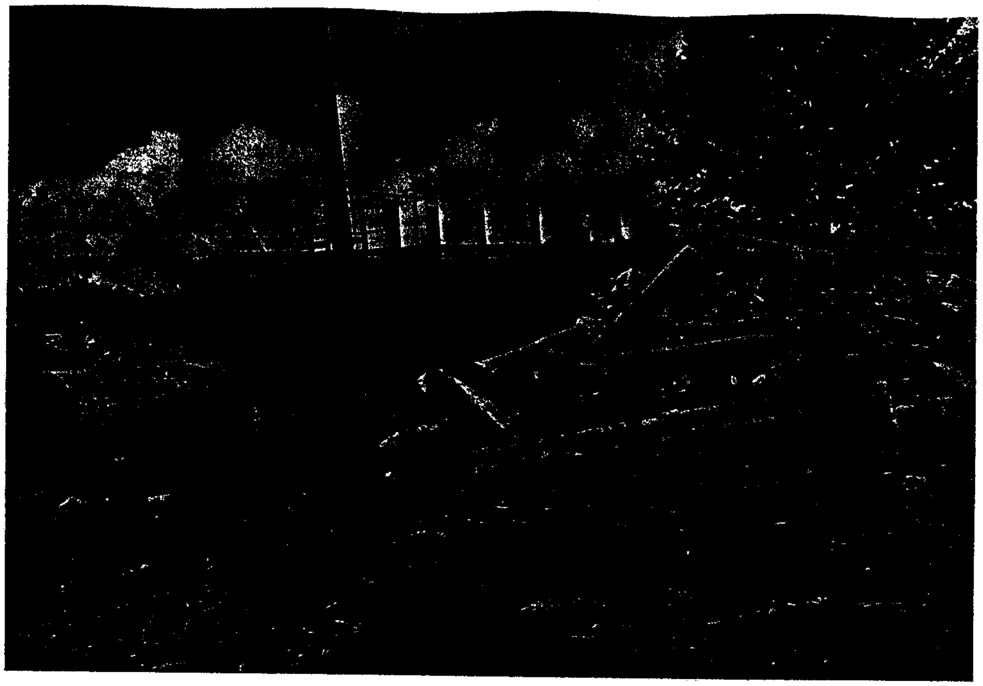
16.2 Overview of the Sandblast Area (SWMU 16) area, facing northeast. The main facility building is to the right in the background. The sandblaster is in the center. (2-26)

16.3 Area to the east of the Sandblast Area (SWMU 16), where sandblast residue was used to fill in the area facing north. The Sandblast Area (SWMU 16) is in the background. (2-27)

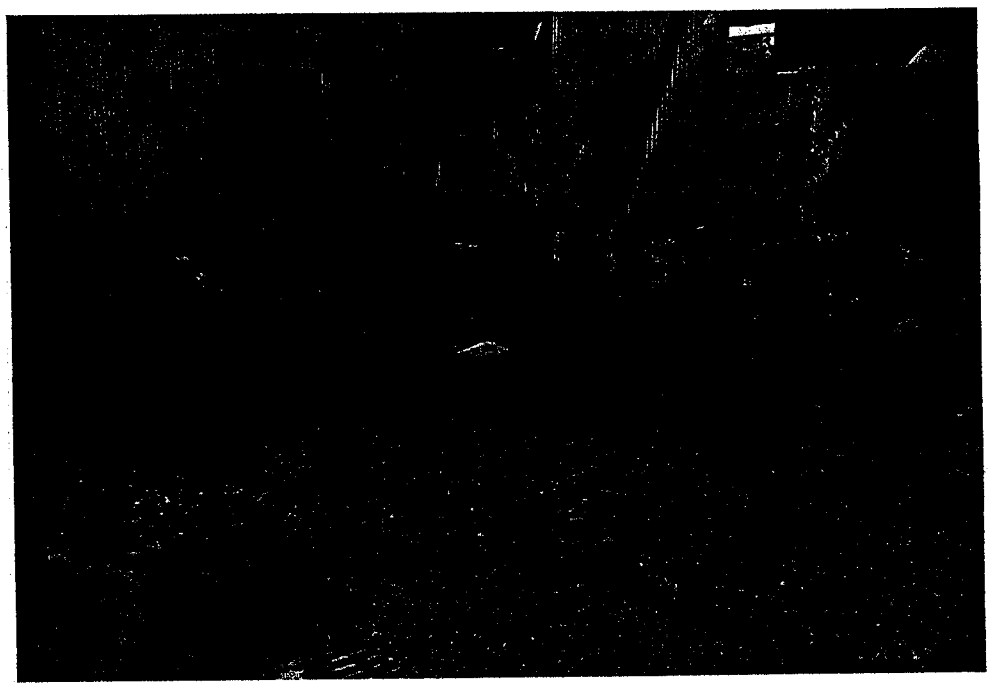
16.4 Area beneath the sandblaster at the Sandblast Area (SWMU 16), facing northeast. Note there appears to be Black Beauty™ residue on the ground. (2-28)

17.1 Facing west towards Chatham Scrap Metal. To the left foreground is the Construction Debris Pile (SWMU 17). Note there appears to be an old 55-gallon drum beneath the piece of concrete. (1-29)

17.2 Close-up panoramic view of the Construction Debris Pile (SWMU 17), facing west. (1-30, 1-31)

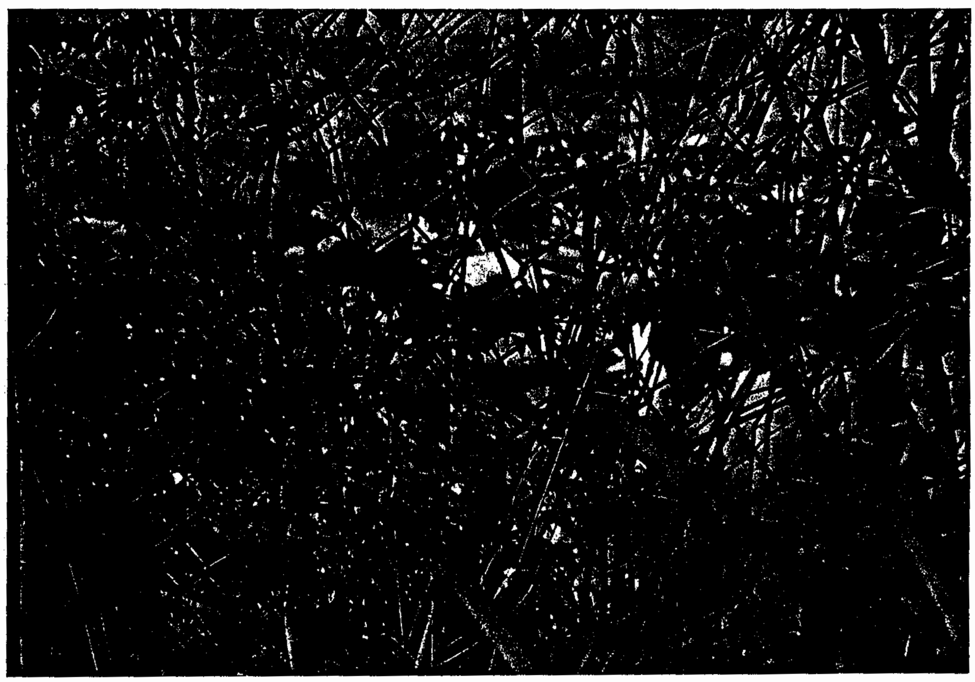


17.3 Overview of the Construction Debris Pile (SWMU 17), facing west. Note Chatham Scrap Metal facility is in the background. The blue metal tank to the left is labeled as scrap. (1-32)

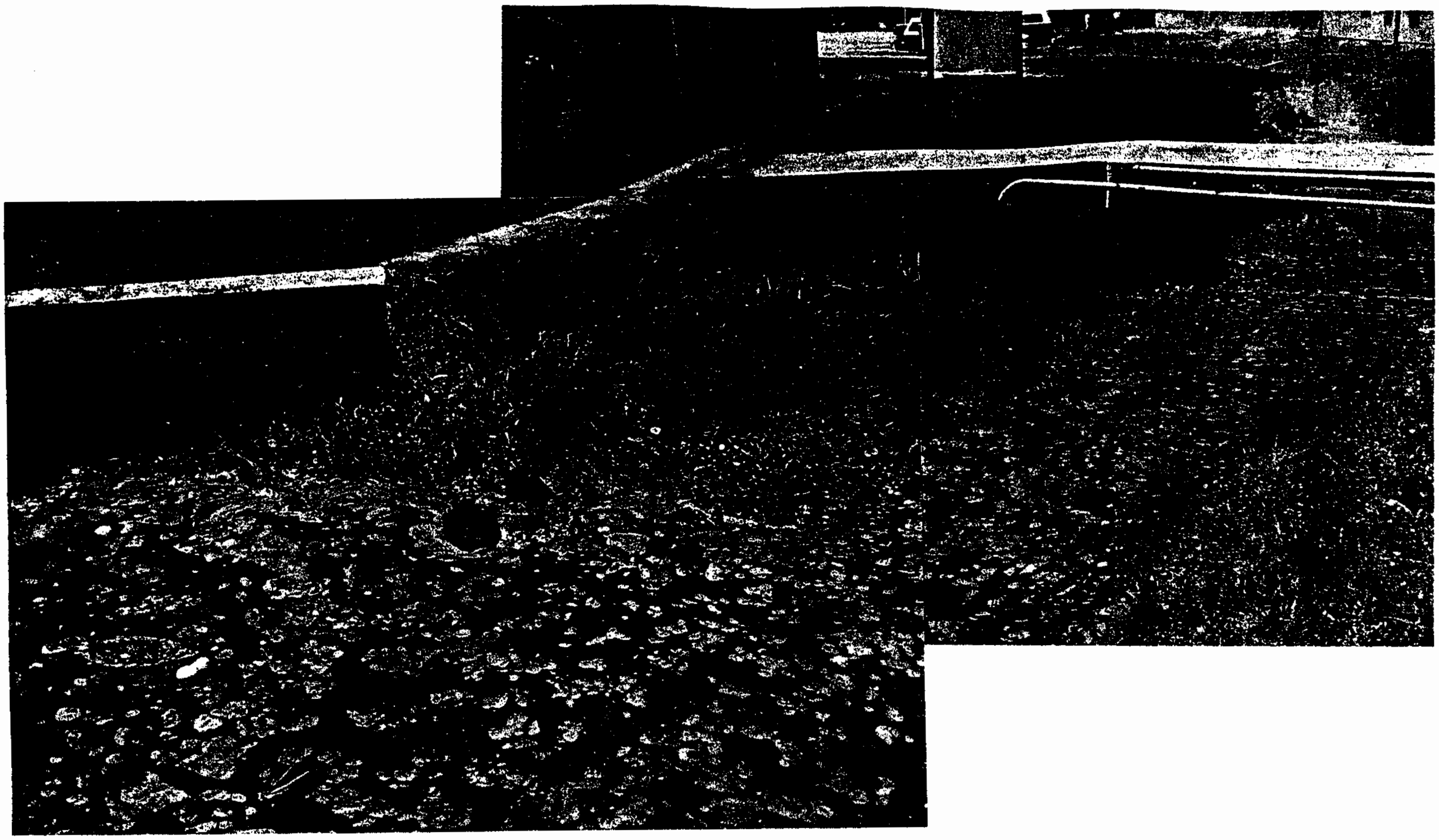


18.1 View of a grate for the Storm Water System (SWMU 18) in the foreground. The Area Adjacent to West Side of Main Facility Building (SWMU 1) is in the background. The drums shown in the background contain solidified coal tar. (1-19)

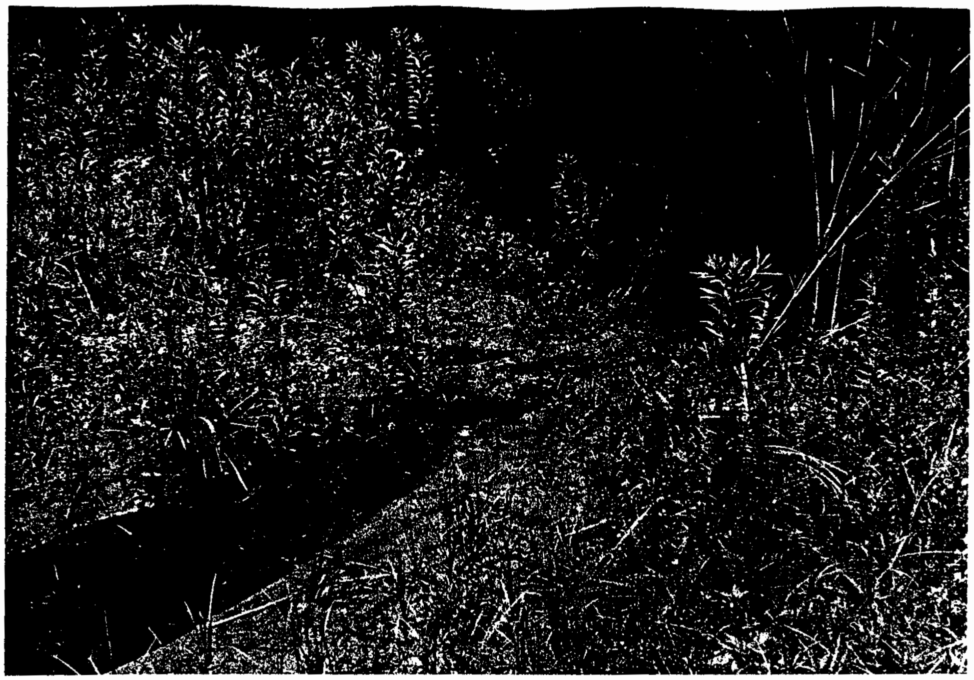
18.2 One of the Storm Water System (SWMU 18) grates, facing east. Note the main facility building is in the background. (2-33)



18.3 View of the point for the Storm Water System (SWMU 18) discharge to the Chatham Scrap Metal facility, facing west. (3-10)



19.1 Panoramic view of Drainage Ditch (SWMU 19), from east to south. According to the facility, the dark coloration and scum on the surface is from the recent top soil application. The top soil application can be seen along the east side of the Drainage Ditch (SWMU 19). (2-12, 2-13)

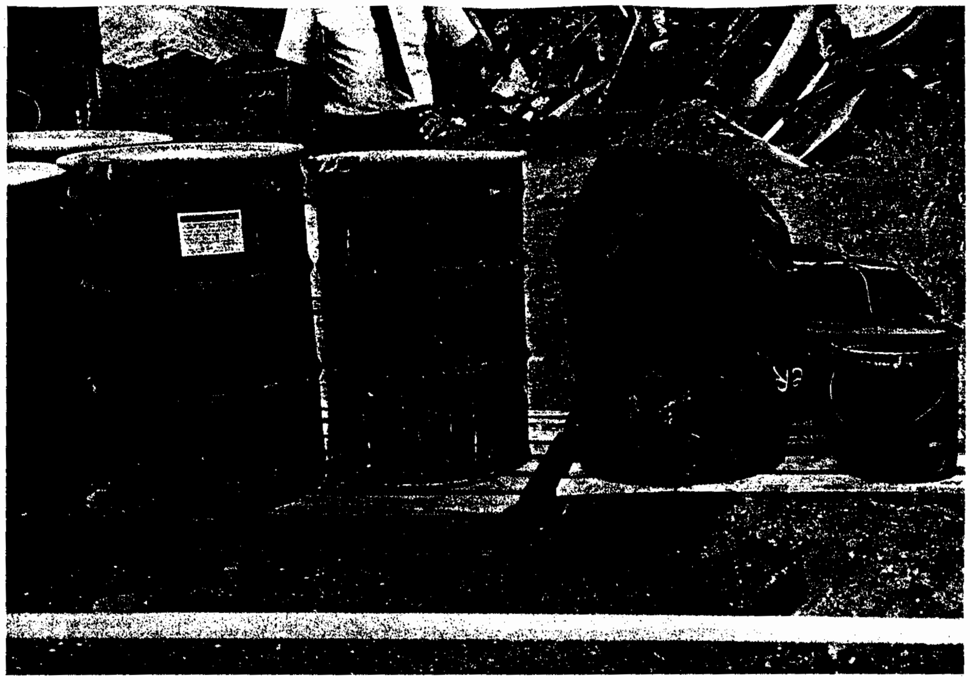


19.2 Discharge point for the Drainage Ditch (SWMU 19), facing southeast. Note the flow is relatively low and the ditch is unlined. (2-15)

19.3 View of Drainage Ditch (SWMU 19), facing northeast. This portion of the unit is located to the east of the main facility building, upstream from the Ramp Area (SWMU 7) and downstream from the Wheelabrator Dust Collector (SWMU 5). There is a small hose in the center of the photograph which discharges ground water collected in the Wheelabrator Sump (AOC C). (2-16)

19.4 View of the discharge pipe for the Drainage Ditch (SWMU 19), facing northwest. The pipe discharges to the Highway Avenue drainage ditch. (2-19)

20.1 Close-up of the drums in the Paint Can Excavation Drum Storage Area (SWMU 20), facing south. The label indicates that the container may contain hazardous materials and that laboratory analyses are pending. (2-25)

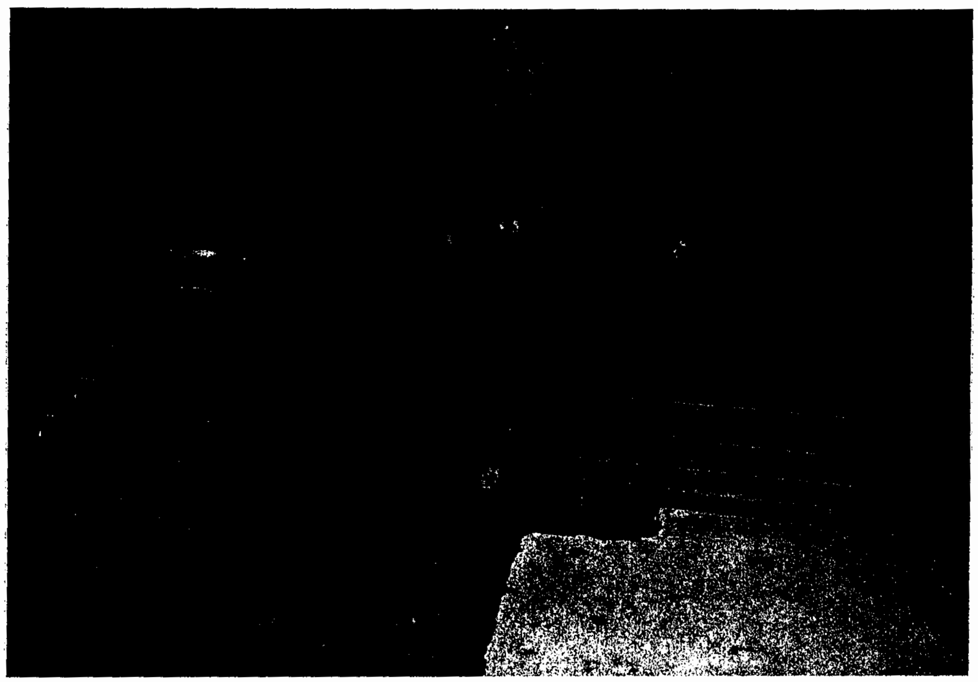


20.2 View of old and crushed drums at the Paint Can Excavation Drum Storage Area (SWMU 20), facing south. (3-11)

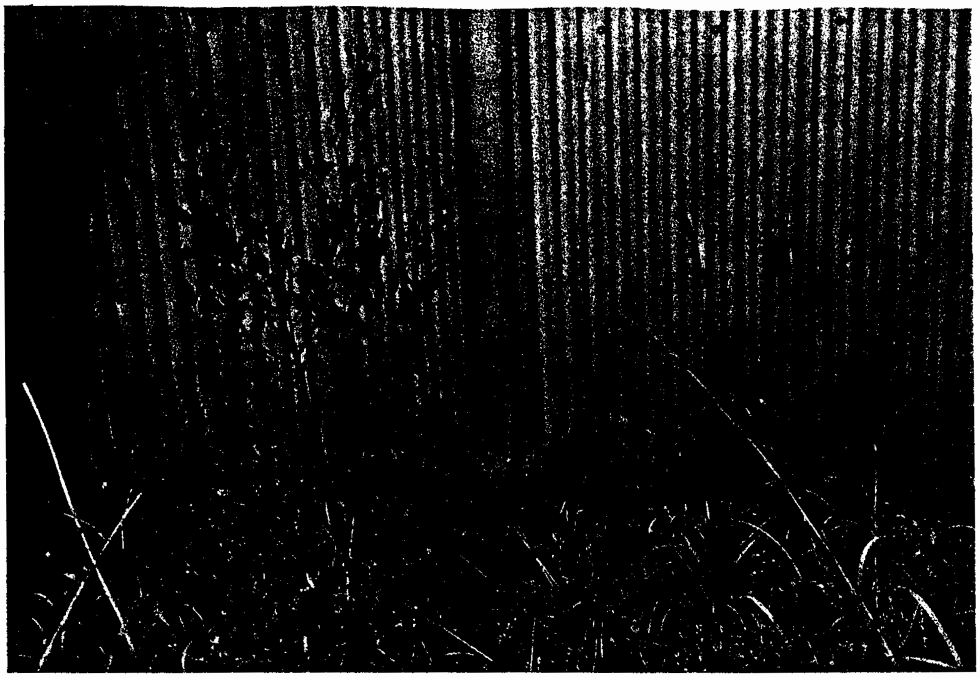
21.1 Close-up view of the Construction Debris/Soil Pile (SWMU 21), facing west. Note the crushed drum in the left foreground. (2-24)

A.1 Overview of the Compressor Area (AOC A), facing east. Note the dark staining on the soil along the base of the concrete pad from recent leakage of the air compressor. (2-9, 2-10)

B.1 See Photograph 7.2.



C.1 View of the pipe from the Wheelabrator Sump (AOC C), facing north. Note the pipe in the photograph carries ground water removed from the low point in the sump. (3-5)



C.2 View, facing west of the pipe from the Wheelabrator Sump (AOC C), as it exits the building and connects to a hose for discharge to the Drainage Ditch (SWMU 19). (3-6)

APPENDIX C

SUPPLEMENTAL PHOTOGRAPHIC LOG

FROM 1990

FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION (FDER)

INSPECTION

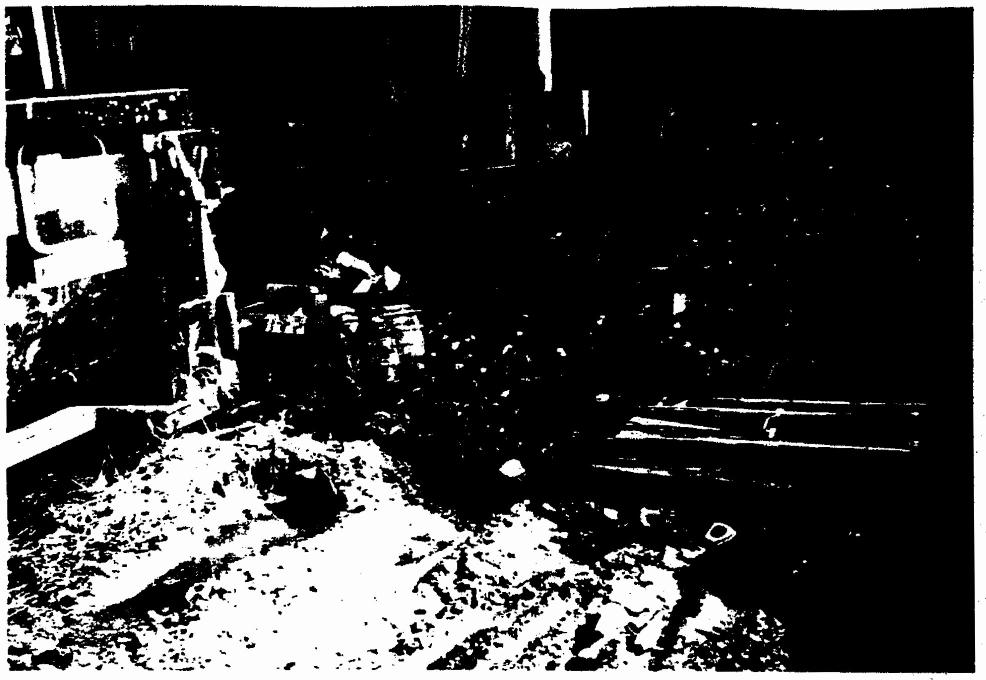
Note: The Supplemental Photographic Log contains photographs taken during a FDER hazardous waste compliance inspection conducted at the Dura-Bond facility on October 22, 1990. Upon the request of EPA, these photographs were included in this report to compare previous conditions with current site conditions.

1.5 View of the Area Adjacent to West Side of Facility Building (SWMU 1), facing southwest. Note the red coloration on the ground adjacent to step.

1.6 View of the Area Adjacent to West Side of Facility Building (SWMU 1), facing south. Note the bucket on the pallet appears to and reportedly contains paint waste containing methyl ethyl ketone (EPA Waste Code F005). The soil appears to be stained and the vegetation is stressed.

1.7 View from inside the facility building looking southwest at the Area Adjacent to West Side of Facility Building (SWMU 1). Note the area is stained and there appears to be paint on the wall on the sheet metal in the background. The vegetation also appears stressed.

1.8 View from the inside of the building looking out toward the Area Adjacent to West Side of Facility Building (SWMU 1). There appears to be red staining on the vegetation.



2.2 View of the Area Immediately Adjacent to Dumpster (SWMU 2), facing northeast. Note the area consists of buckets and paint cans. The dumpster, in the background appears to contain an overturned drum with paint cans.

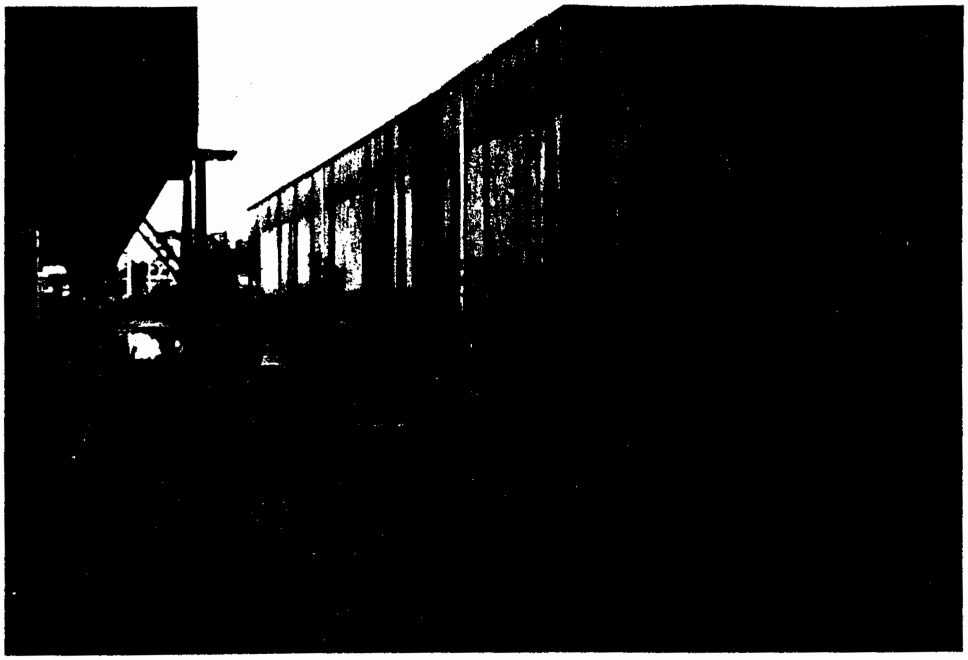
2.3 Panoramic view of the Area Immediately Adjacent to Dumpster (SWMU 2), facing northeast. Note the assortment of paint cans and buckets in contact with the soil.

2.4 Close-up view of ground staining adjacent to the Area Immediately Adjacent to Dumpster (SWMU 2), facing east.

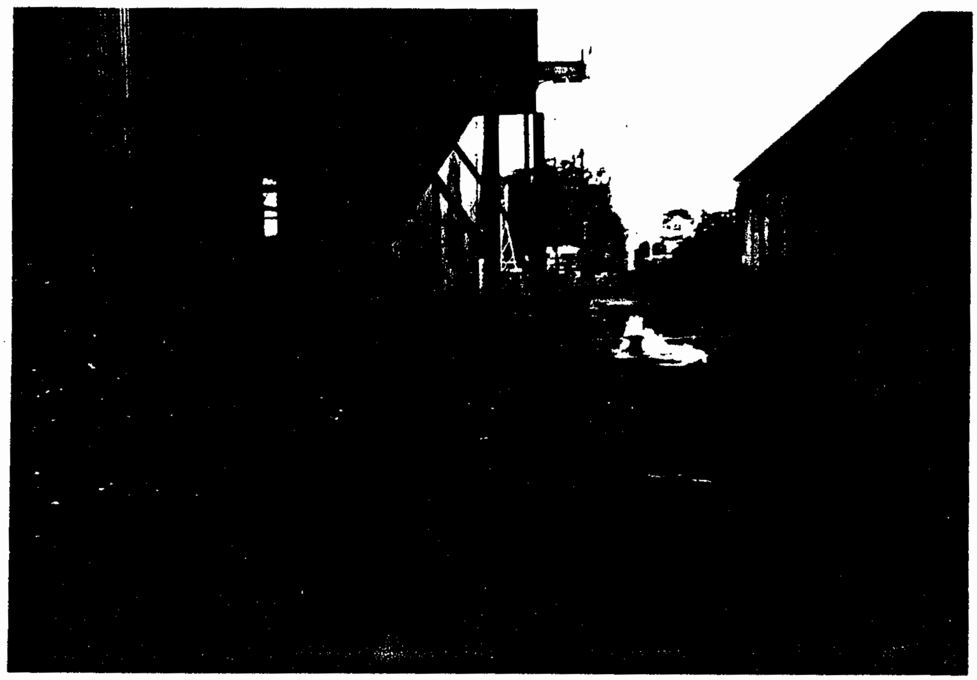
2.5 Close-up view of an overturned drum and material resembling black coal tar adjacent to the Area Immediately Adjacent to Dumpster (SWMU 2), facing north. Note the Temporary Waste Storage Area (SWMU 3) is located to the right of the photograph.

3.3 Overview of the Temporary Waste Storage Area (SWMU 3), facing north. Note the overturned dented drum in the center.

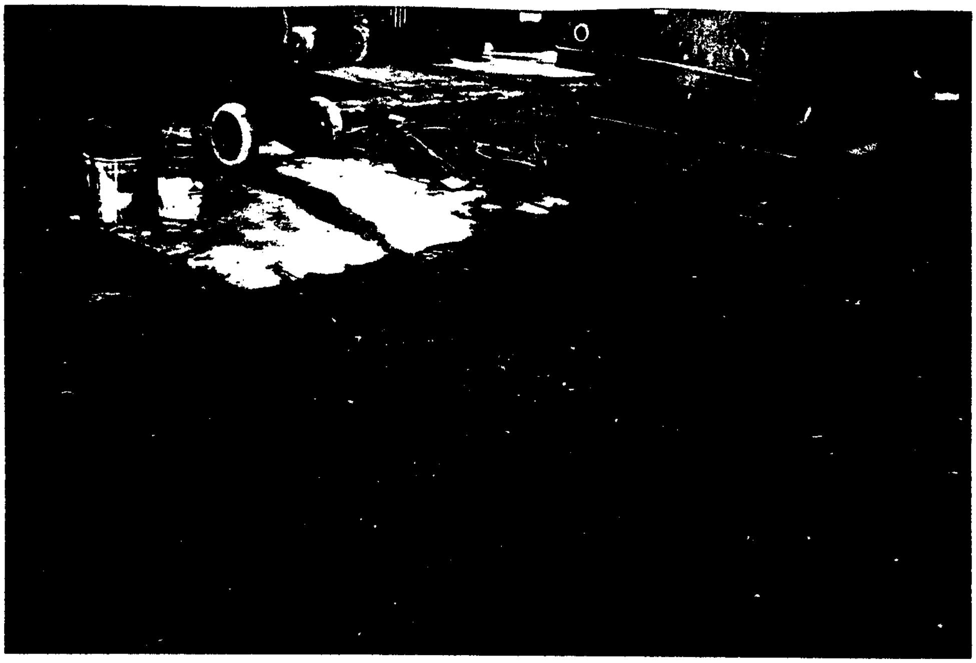
4.4 Close-up of drums containing methyl ethyl ketone waste located adjacent to the Hazardous Materials/Waste Storage Area (SWMU 4), facing west.



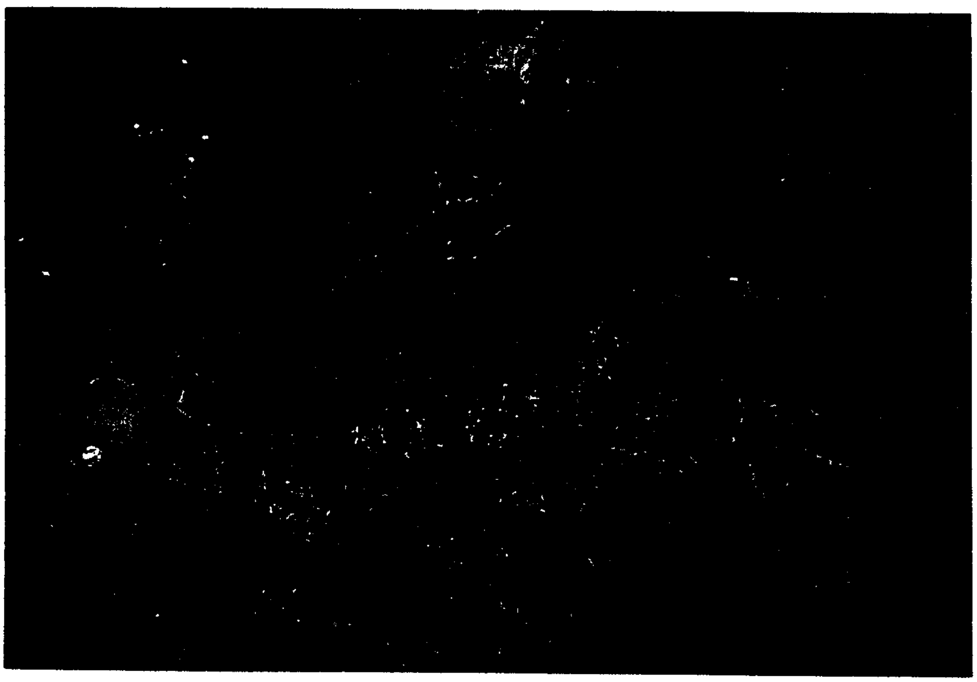
5.4 Overview of the Wheelabrator Dust Collector (SWMU 5), facing northwest. Note the Sandblast Residue Fill Area (SWMU 8) is located in the right background.



5.5 View of the Wheelabrator Dust Collector (SWMU 5), facing north. Note the wheelabrator dust on the ground beneath the unit.



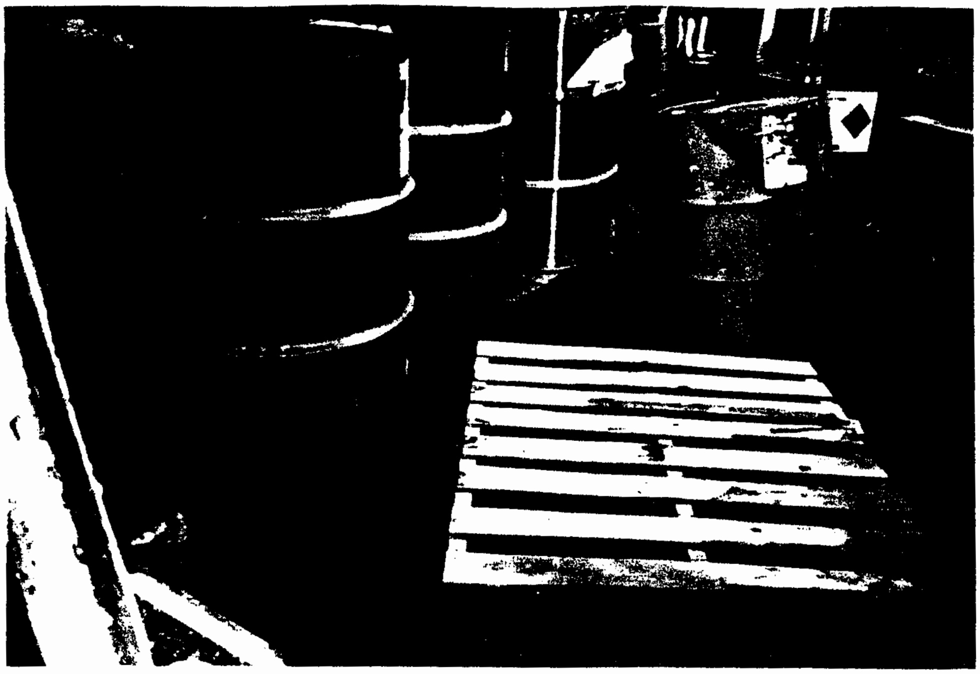
7.4 Overview of the Ramp Area (SWMU 7), facing northwest. Note the concrete ramp and soil appears stained and there is sparse vegetation.



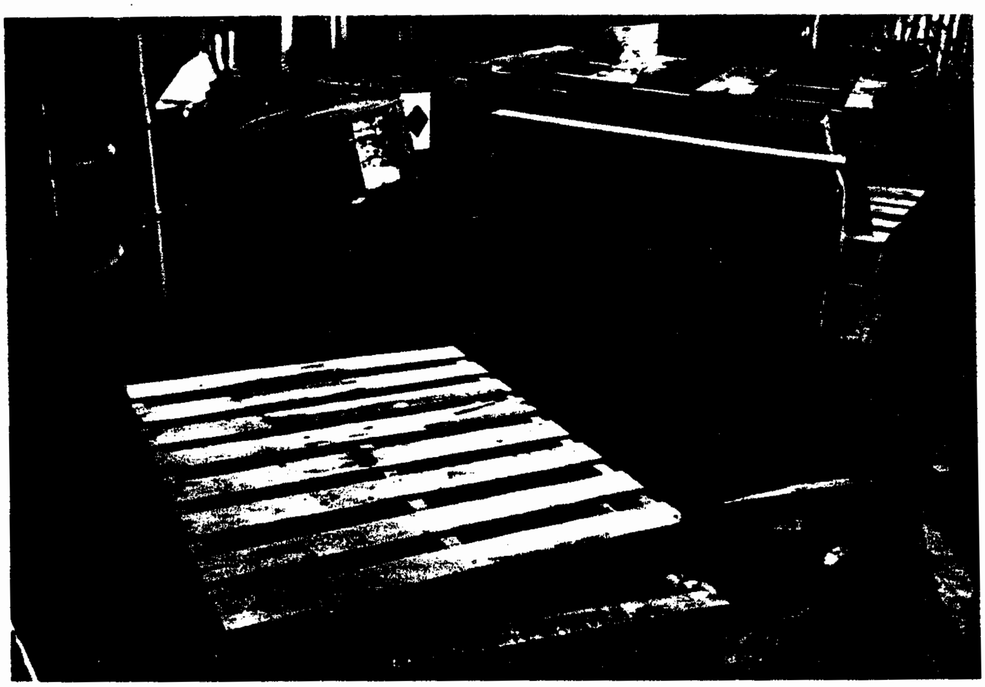
8.3 Close-up view of the Sandblast Residue Fill Area (SWMU 8), facing east. Note the residue pile is much larger than that seen in the 1992 photograph.

8.4 Overview of the Sandblast Residue Fill Area (SWMU 8), facing north. Note that there is ponding by rainfall, indicating that this is a low area.

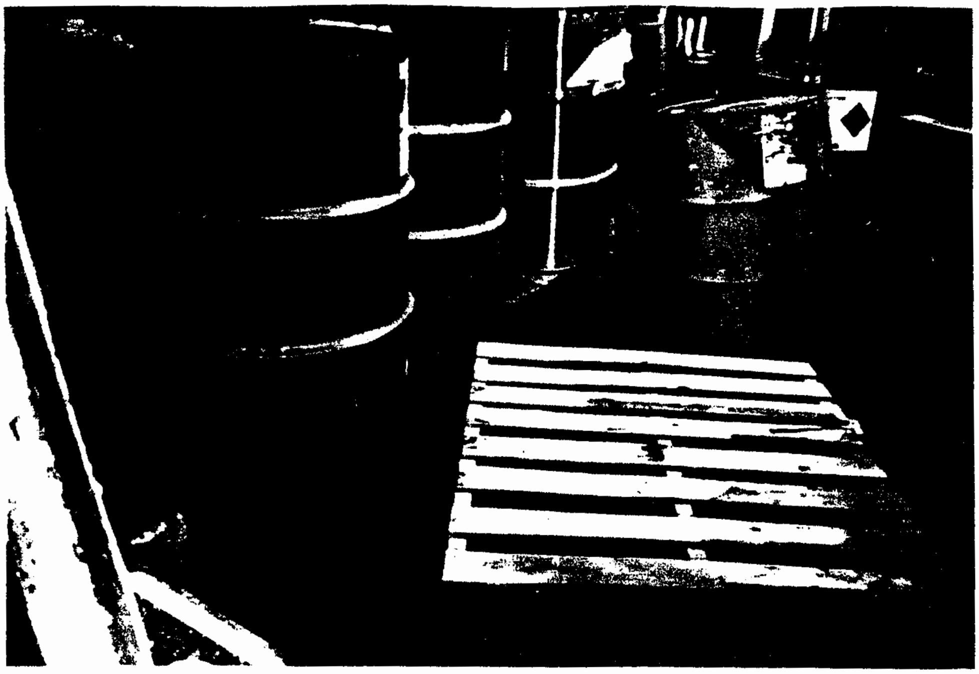
9.3 View of the Historical Outside Storage Area (SWMU 9), facing southwest.



9.4 View of the Historical Outside Storage Area (SWMU 9), facing southwest. Note paint spillage on the concrete and the soil in the background.

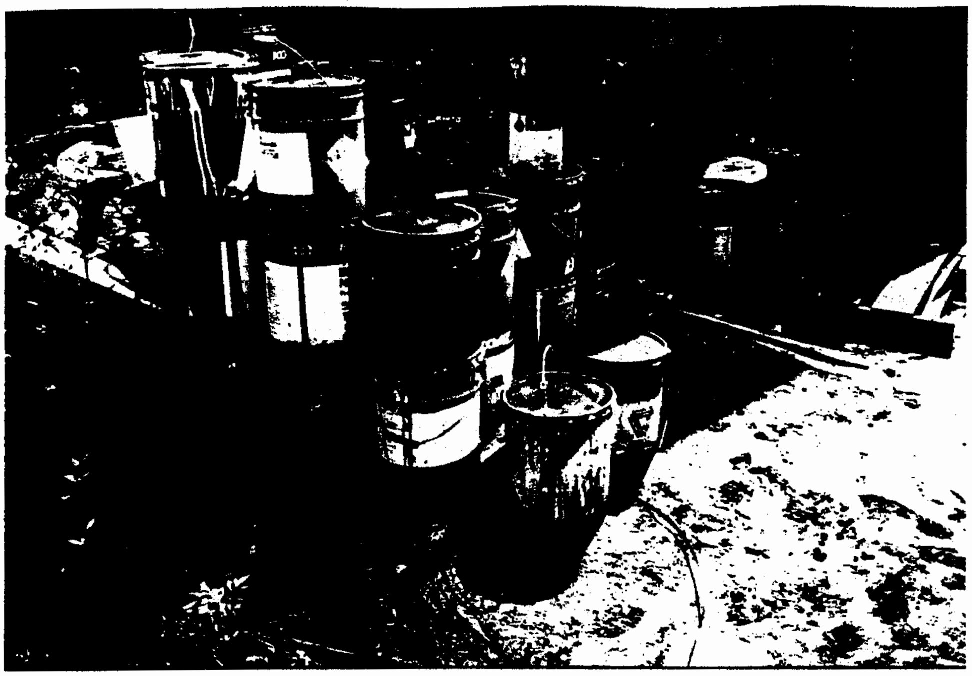


9.5 View of the Historical Outside Storage Area (SWMU 9), facing southwest.



9.4 View of the Historical Outside Storage Area (SWMU 9), facing southwest. Note paint spillage on the concrete and the soil in the background.

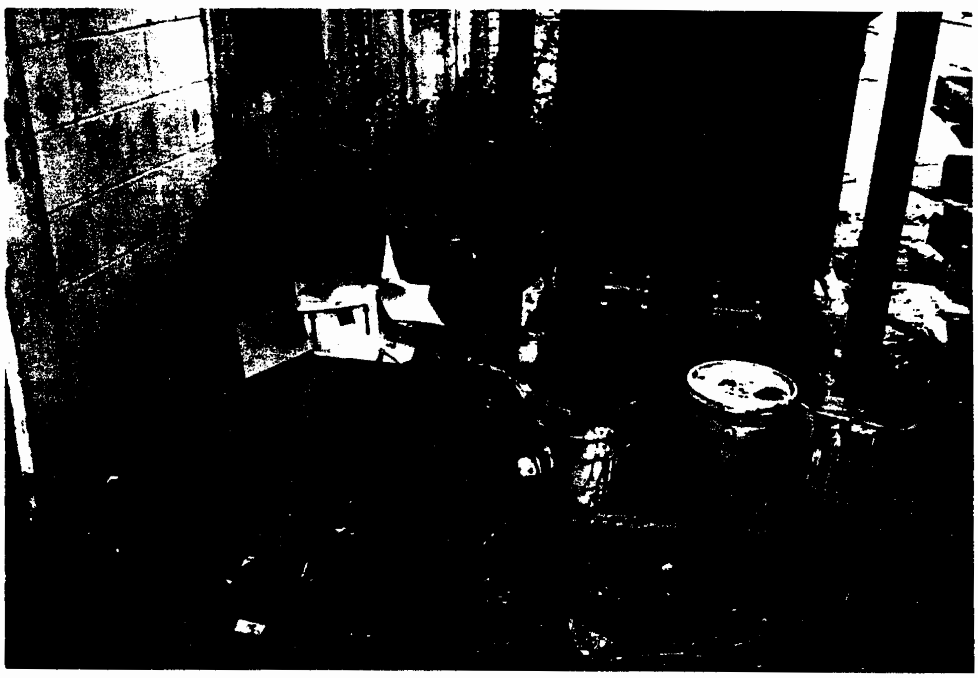
9.5 View of the Historical Outside Storage Area (SWMU 9), facing southwest.



10.2 View of the area outside of the Blue Shed (SWMU 10), facing an unknown direction. Note the paint cans are covered and most are resting on wooden pallets.

10.3 View of the area outside of the Blue Shed (SWMU 10), facing an unknown direction. Note the drums are positioned on concrete and all have lids.

10.4 View of the area outside of the Blue Shed (SWMU 10), facing an unknown direction. Note the can in the foreground is crushed and some material (possible coal tar) has leaked from the can.



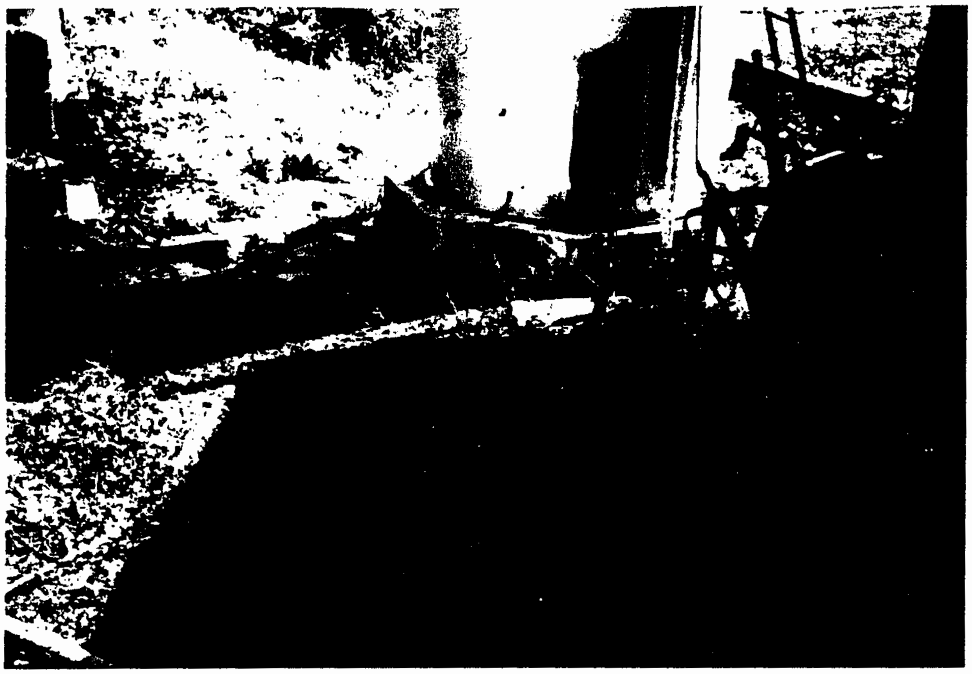
10.5 View of the area outside of the Blue Shed (SWMU 10), facing an unknown direction. Note there appears to be some minor spillage of paint from a paint can on the right hand side of the photograph.

11.1 View of the Sheet Metal Building (SWMU 11), facing an unknown direction. Note the drums appear to be in poor condition.

11.2 View of the Sheet Metal Building (SWMU 11), facing an unknown direction. Note the paint cans are closed.

11.3 View inside the Sheet Metal Building (SWMU 11), facing an unknown direction. Note these paint cans are piled in a mound in the background.

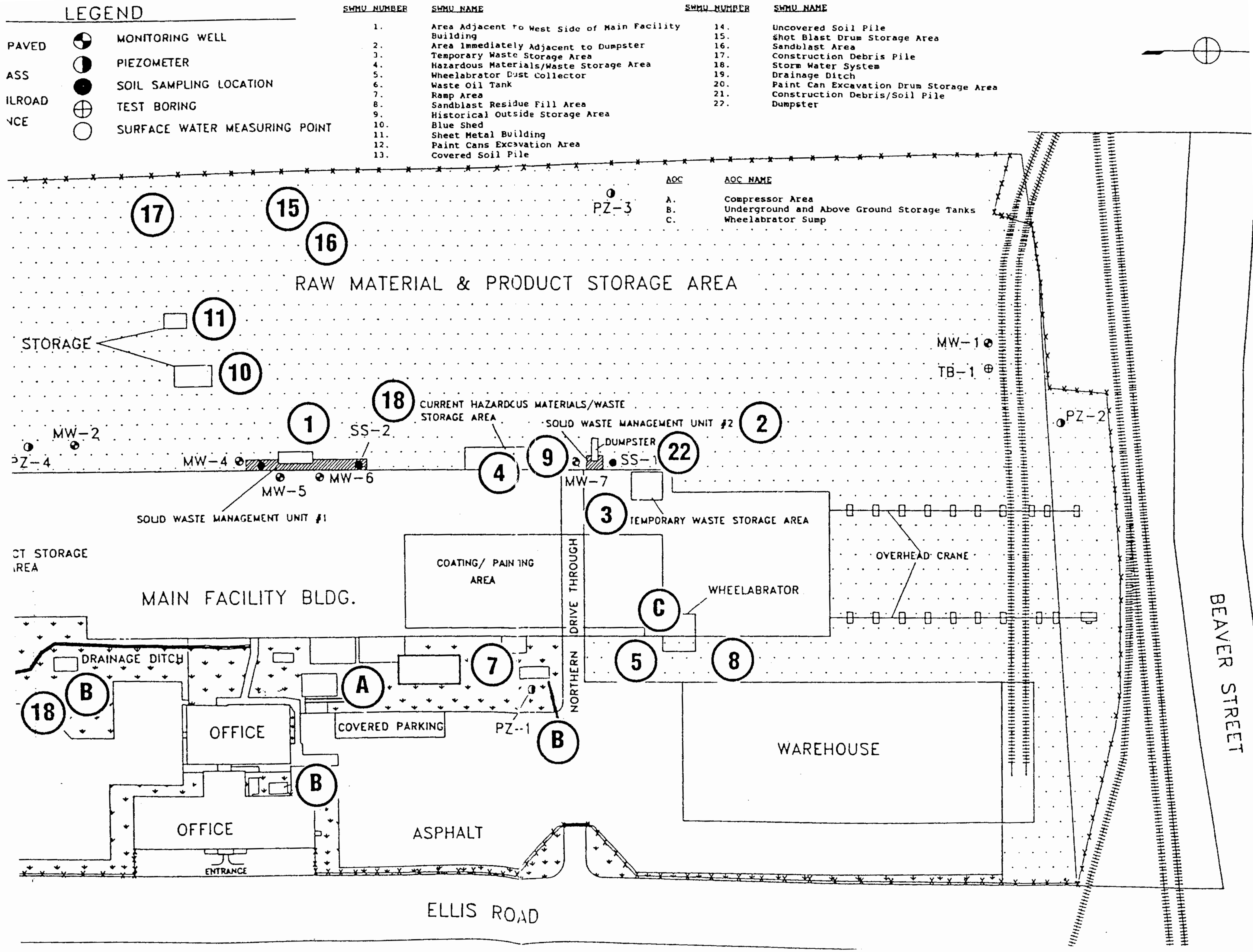
12.6 View of the Paint Cans Area (SWMU 12), taken immediately following the discovery of the paint cans in April 1992.



A.2 View of the Compressor Area (AOC A), facing southeast. Note the dark staining on soil around the tank.

APPENDIX D

SWMU LOCATION MAP


LEGEND
PAVED
ASS
ILROAD
NCE
MONITORING WELL
PIEZOMETER
SOIL SAMPLING LOCATION
TEST BORING
SURFACE WATER MEASURING POINT
SWMU NUMBER
SWMU NAME
1. Area Adjacent to West Side of Main Facility Building
2. Area Immediately Adjacent to Dumpster
3. Temporary Waste Storage Area
4. Hazardous Materials/Waste Storage Area
5. Wheelabrator Dust Collector
6. Waste Oil Tank
7. Ramp Area
8. Sandblast Residue Fill Area
9. Historical Outside Storage Area
10. Blue Shed
11. Sheet Metal Building
12. Paint Cans Excavation Area
13. Covered Soil Pile
14. Uncovered Soil Pile
15. Shot Blast Drum Storage Area
16. Sandblast Area
17. Construction Debris Pile
18. Storm Water System
19. Drainage Ditch
20. Paint Can Excavation Drum Storage Area
21. Construction Debris/Soil Pile
22. Dumpster
AOC
AOC NAME
A. Compressor Area
B. Underground and Above Ground Storage Tanks
C. Wheelabrator Sump
17
15
16
PZ-3
RAW MATERIAL & PRODUCT STORAGE AREA
11
STORAGE
10
MW-1
TB-1
PZ-2
18
CURRENT HAZARDOUS MATERIALS/WASTE STORAGE AREA
1
SS-2
SOLID WASTE MANAGEMENT UNIT #2
2
MW-2
DUMPSTER
PZ-4
MW-4
MW-6
4
9
SS-1
22
MW-5
MW-7
3
SOLID WASTE MANAGEMENT UNIT #1
TEMPORARY WASTE STORAGE AREA
CT STORAGE AREA
COATING/ PAINTING AREA
NORTHERN DRIVE THROUGH
OVERHEAD CRANE
WHEELABRATOR
MAIN FACILITY BLDG.
C
DRAINAGE DITCH
7
5
8
B
A
18
OFFICE
COVERED PARKING
PZ-1
B
WAREHOUSE
BEAVER STREET
B
OFFICE
ASPHALT
ENTRANCE
ELLIS ROAD